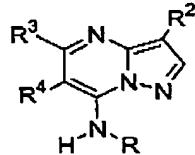


Amendments to the Claims

The listing of claims will replace all prior versions and listing of claims in the application:

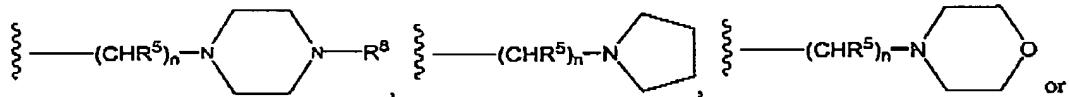
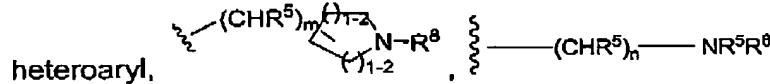
Listing of Claims:

5 Claim 1 (currently amended): A compound represented by the structural formula:



or a pharmaceutically acceptable salt of said compound,  
wherein:

10 R is H, alkyl, alkenyl, alkynyl, arylalkyl, arylalkenyl, cycloalkyl, cycloalkylalkyl, alkenylalkyl, alkynylalkyl, heterocycl, heterocyclalkyl, heteroarylalkyl (including N-oxide of said heteroaryl), -(CHR<sup>5</sup>)<sub>n</sub>-aryl, -(CHR<sup>5</sup>)<sub>n</sub>-



15 15 wherein each of said alkyl, alkenyl, alkynyl, aryl, cycloalkyl, heterocycl, and heteroaryl can be unsubstituted or optionally substituted with one or more moieties which can be the same or different, each moiety being independently selected from the group consisting of halogen, alkyl, cycloalkyl,

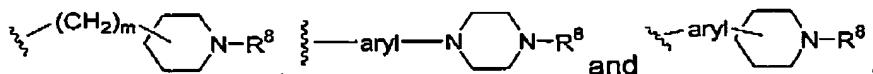
20 heterocyclalkyl, CF<sub>3</sub>, OCF<sub>3</sub>, CN, -OR<sup>5</sup>, -NR<sup>5</sup>R<sup>10</sup>, -C(R<sup>4</sup>R<sup>5</sup>)<sub>p</sub>-R<sup>9</sup>, -N(R<sup>5</sup>)Boc, -(CR<sup>4</sup>R<sup>5</sup>)<sub>p</sub>OR<sup>5</sup>, -C(O<sub>2</sub>)R<sup>5</sup>, -C(O)R<sup>5</sup>, -C(O)NR<sup>5</sup>R<sup>10</sup>, -SO<sub>3</sub>H, -SR<sup>10</sup>, -S(O<sub>2</sub>)R<sup>7</sup>, -S(O<sub>2</sub>)NR<sup>5</sup>R<sup>10</sup>, -N(R<sup>5</sup>)S(O<sub>2</sub>)R<sup>7</sup>, -N(R<sup>5</sup>)C(O)R<sup>7</sup> and -N(R<sup>5</sup>)C(O)NR<sup>5</sup>R<sup>10</sup>;

R<sup>2</sup> is selected from the group consisting of R<sup>9</sup>, alkyl, alkenyl, alkynyl,

25 CF<sub>3</sub>, heterocycl, heterocyclalkyl, halogen, haloalkyl, aryl, arylalkyl, heteroarylalkyl, alkynylalkyl, cycloalkyl, heteroaryl, alkyl substituted with 1-6 R<sup>9</sup> groups which can be the same or different and are independently selected

from the list of R<sup>9</sup> shown below, aryl substituted with 1-3 aryl or heteroaryl groups which can be the same or different and are independently selected from phenyl, pyridyl, thiophenyl, furanyl and thiazolo groups, aryl fused with 1-heteroaryl group, heteroaryl substituted with 1-3 aryl or heteroaryl

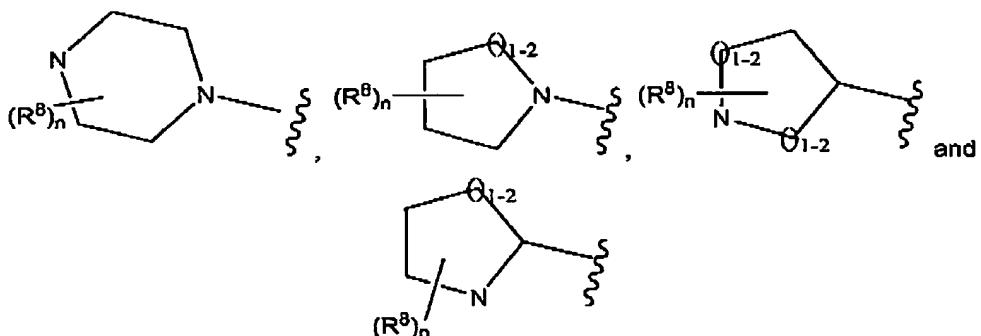
5 groups which can be the same or different and are independently selected from phenyl, pyridyl, thiophenyl, furanyl and thiazolo groups, heteroaryl fused



10 wherein one or more of the aryl and/or one or more of the heteroaryl in  
the above-noted definitions for R<sup>2</sup> can be unsubstituted or optionally  
substituted with one or more moieties which can be the same or different,  
each moiety being independently selected from the group consisting of

15 alkyl, aryl and  $\text{OCF}_3$ ;

$R^3$  is selected from the group consisting of H, halogen,  $-NR^5R^6$ ,  $-OR^6$ ,  $-SR^6$ ,  $-C(O)N(R^5R^6)$ , alkyl, alkynyl, cycloalkyl, aryl, arylalkyl, heterocyclyl, heterocyclylalkyl, heteroaryl and heteroarylalkyl,



wherein each of said alkyl, cycloalkyl, aryl, arylalkyl, heterocyclyl, heterocyclalkyl, heteroaryl and heteroarylalkyl for  $R^3$  and the heterocyclyl moieties whose structures are shown immediately above for  $R^3$  can be unsubstituted or optionally independently substituted with one or more moieties which can be the same or different, each moiety being independently

selected from the group consisting of halogen, alkyl, aryl, cycloalkyl, CF<sub>3</sub>, CN, -OCF<sub>3</sub>, -(CR<sup>4</sup>R<sup>5</sup>)<sub>p</sub>OR<sup>6</sup>, -OR<sup>5</sup>, -NR<sup>5</sup>R<sup>6</sup>, -(CR<sup>4</sup>R<sup>5</sup>)<sub>p</sub>NR<sup>5</sup>R<sup>6</sup>, -C(O<sub>2</sub>)R<sup>5</sup>, -C(O)R<sup>5</sup>, -C(O)NR<sup>5</sup>R<sup>6</sup>, -SR<sup>6</sup>, -S(O<sub>2</sub>)R<sup>6</sup>, -S(O<sub>2</sub>)NR<sup>5</sup>R<sup>6</sup>, -N(R<sup>5</sup>)S(O<sub>2</sub>)R<sup>7</sup>, -N(R<sup>5</sup>)C(O)R<sup>7</sup> and

-N(R<sup>5</sup>)C(O)NR<sup>5</sup>R<sup>6</sup>, with the proviso that no carbon adjacent to a nitrogen atom

5 on a heterocyclyl ring carries a -OR<sup>5</sup> moiety;

R<sup>4</sup> is H, halo or alkyl;

R<sup>5</sup> is H, alkyl, aryl or cycloalkyl;

R<sup>6</sup> is selected from the group consisting of H, alkyl, alkenyl, aryl,

arylalkyl, arylalkenyl, cycloalkyl, heterocyclyl, heterocyclylalkyl, heteroaryl,

10 and heteroarylalkyl, wherein each of said alkyl, aryl, arylalkyl, cycloalkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, and heteroarylalkyl can be unsubstituted or optionally substituted with one or more moieties which can be the same or different, each moiety being independently selected from the group consisting of halogen, alkyl, aryl, cycloalkyl, heterocyclylalkyl, CF<sub>3</sub>,

15 OCF<sub>3</sub>, CN, -OR<sup>5</sup>, -NR<sup>5</sup>R<sup>10</sup>, -C(R<sup>4</sup>R<sup>5</sup>)<sub>p</sub>-R<sup>9</sup>, -N(R<sup>5</sup>)Boc, -(CR<sup>4</sup>R<sup>5</sup>)<sub>p</sub>OR<sup>5</sup>, -C(O<sub>2</sub>)R<sup>5</sup>, -C(O)R<sup>5</sup>, -C(O)NR<sup>5</sup>R<sup>10</sup>, -SO<sub>3</sub>H, -SR<sup>10</sup>, -S(O<sub>2</sub>)R<sup>7</sup>, -S(O<sub>2</sub>)NR<sup>5</sup>R<sup>10</sup>, -N(R<sup>5</sup>)S(O<sub>2</sub>)R<sup>7</sup>, -N(R<sup>5</sup>)C(O)R<sup>7</sup> and -N(R<sup>5</sup>)C(O)NR<sup>5</sup>R<sup>10</sup>;

20 R<sup>10</sup> is selected from the group consisting of H, alkyl, aryl, arylalkyl, cycloalkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, and heteroarylalkyl, wherein each of said alkyl, aryl, arylalkyl, cycloalkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, and heteroarylalkyl can be unsubstituted or optionally substituted with one or more moieties which can be the same or different, each moiety being independently selected from the group consisting of halogen, alkyl, aryl, cycloalkyl, heterocyclylalkyl, CF<sub>3</sub>, OCF<sub>3</sub>, CN, -OR<sup>5</sup>, -NR<sup>4</sup>R<sup>5</sup>, -C(R<sup>4</sup>R<sup>5</sup>)<sub>p</sub>-R<sup>9</sup>, -N(R<sup>5</sup>)Boc, -(CR<sup>4</sup>R<sup>5</sup>)<sub>p</sub>OR<sup>5</sup>, -C(O<sub>2</sub>)R<sup>5</sup>, -C(O)NR<sup>4</sup>R<sup>5</sup>, -C(O)R<sup>5</sup>, -SO<sub>3</sub>H, -SR<sup>5</sup>, -S(O<sub>2</sub>)R<sup>7</sup>, -S(O<sub>2</sub>)NR<sup>4</sup>R<sup>5</sup>, -N(R<sup>5</sup>)S(O<sub>2</sub>)R<sup>7</sup>, -N(R<sup>5</sup>)C(O)R<sup>7</sup> and -N(R<sup>5</sup>)C(O)NR<sup>4</sup>R<sup>5</sup>;

25 or optionally (i) R<sup>5</sup> and R<sup>10</sup> in the moiety -NR<sup>5</sup>R<sup>10</sup>, or (ii) R<sup>5</sup> and R<sup>6</sup> in the moiety -NR<sup>5</sup>R<sup>6</sup>, may be joined together to form a cycloalkyl or heterocyclyl moiety, with each of said cycloalkyl or heterocyclyl moiety being unsubstituted or optionally independently being substituted with one or more R<sup>9</sup> groups;

30 R<sup>7</sup> is selected from the group consisting of alkyl, cycloalkyl, aryl, arylalkenyl, heteroaryl, arylalkyl, heteroarylalkyl, heteroarylalkenyl, and

heterocyclyl, wherein each of said alkyl, cycloalkyl, heteroarylalkyl, aryl, heteroaryl and arylalkyl can be unsubstituted or optionally independently substituted with one or more moieties which can be the same or different, each moiety being independently selected from the group consisting of

5 halogen, alkyl, aryl, cycloalkyl, CF<sub>3</sub>, OCF<sub>3</sub>, CN, -OR<sup>5</sup>, -NR<sup>5</sup>R<sup>10</sup>, -CH<sub>2</sub>OR<sup>5</sup>,  
-C(O<sub>2</sub>)R<sup>5</sup>, -C(O)NR<sup>5</sup>R<sup>10</sup>, -C(O)R<sup>5</sup>, -SR<sup>10</sup>, -S(O<sub>2</sub>)R<sup>10</sup>, -S(O<sub>2</sub>)NR<sup>5</sup>R<sup>10</sup>,  
-N(R<sup>5</sup>)S(O<sub>2</sub>)R<sup>10</sup>, -N(R<sup>5</sup>)C(O)R<sup>10</sup> and -N(R<sup>5</sup>)C(O)NR<sup>5</sup>R<sup>10</sup>;

R<sup>8</sup> is selected from the group consisting of R<sup>6</sup>, -OR<sup>6</sup>, -C(O)NR<sup>5</sup>R<sup>10</sup>,  
-S(O<sub>2</sub>)NR<sup>5</sup>R<sup>10</sup>, -C(O)R<sup>7</sup>, -C(=N-CN)-NH<sub>2</sub>, -C(=NH)-NHR<sup>5</sup>, heterocyclyl, and  
10 -S(O<sub>2</sub>)R<sup>7</sup>;

R<sup>9</sup> is selected from the group consisting of halogen, -CN, -NR<sup>5</sup>R<sup>10</sup>,  
-C(O<sub>2</sub>)R<sup>6</sup>, -C(O)NR<sup>5</sup>R<sup>10</sup>, -OR<sup>6</sup>, -SR<sup>6</sup>, -S(O<sub>2</sub>)R<sup>7</sup>, -S(O<sub>2</sub>)NR<sup>5</sup>R<sup>10</sup>, -N(R<sup>5</sup>)S(O<sub>2</sub>)R<sup>7</sup>,  
-N(R<sup>5</sup>)C(O)R<sup>7</sup> and -N(R<sup>5</sup>)C(O)NR<sup>5</sup>R<sup>10</sup>;

m is 0 to 4;

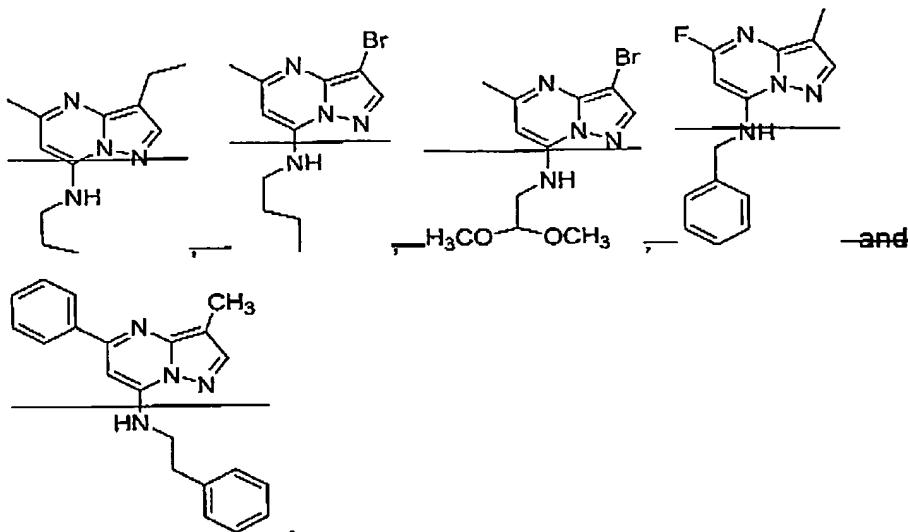
15 n is 1 to 4; and

p is 1 to 4,

with the proviso that when R<sup>2</sup> is phenyl, R<sup>3</sup> is not alkyl, alkynyl or halogen, and

that when R<sup>2</sup> is aryl, R is not  $\begin{array}{c} \S \\ \S \end{array} - (\text{CHR}^5)_n - \text{NR}^5\text{R}^8$ , and with the further  
proviso that when R is arylalkyl, then any heteroaryl substituent on the aryl of  
20 said arylalkyl contains at least three heteroatoms, and with the additional  
proviso that the compound of the structural formula above excludes the  
following compounds:

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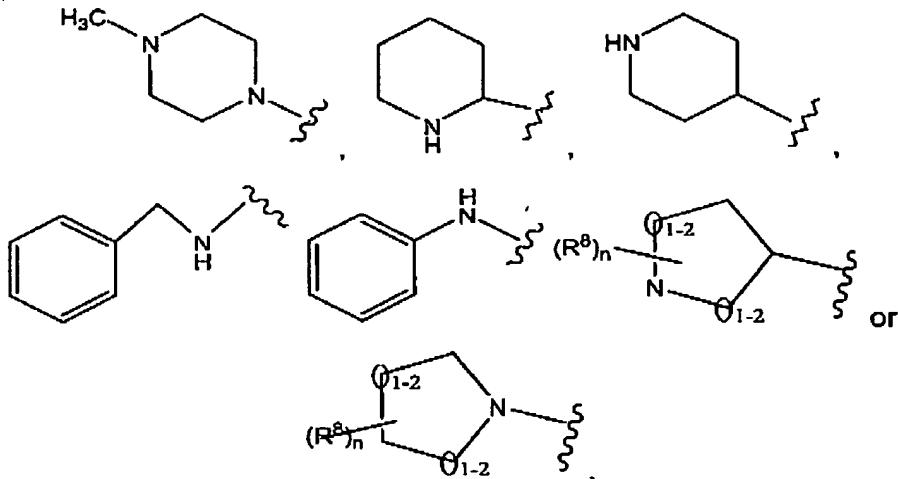


Claim 2 (currently amended): The compound of claim 1, wherein R is -

5  $(\text{CHR}^5)_n$ -aryl,  $-(\text{CHR}^5)_n$ -heteroaryl, alkyl, cycloalkyl, heterocyclyl, or heteroarylalkyl (including N-oxide of said heteroaryl), wherein each of said alkyl, aryl, cycloalkyl, heterocyclyl and heteroaryl can be unsubstituted or optionally substituted with one or more moieties as stated in claim 1;

$\text{R}^2$  is halogen, alkyl, haloalkyl, CN, cycloalkyl, heterocyclyl or alkynyl;

10  $\text{R}^3$  is H, lower-alkyl, aryl, heteroaryl, cycloalkyl,  $-\text{NR}^5\text{R}^6$ ,



wherein said alkyl, aryl, heteroaryl, cycloalkyl and the heterocyclyl structures

15 shown immediately above for  $\text{R}^3$  are optionally substituted with one or more

moieties which can be the same or different, each moiety being independently selected from the group consisting of halogen, CF<sub>3</sub>, OCF<sub>3</sub>, lower alkyl, CN,

-C(O)R<sup>5</sup>, -S(O<sub>2</sub>)R<sup>5</sup>, -C(=NH)-NH<sub>2</sub>, -C(=CN)-NH<sub>2</sub>, hydroxyalkyl, alkoxycarbonyl, -SR<sup>5</sup>, and OR<sup>5</sup>, with the proviso that no carbon adjacent to a nitrogen atom on

5 a heterocycl ring carries a -OR<sup>5</sup> moiety;

R<sup>4</sup> is H or lower alkyl;

R<sup>5</sup> is H, lower alkyl or cycloalkyl;

n is 1 to 2; and

p is 1 or 2.

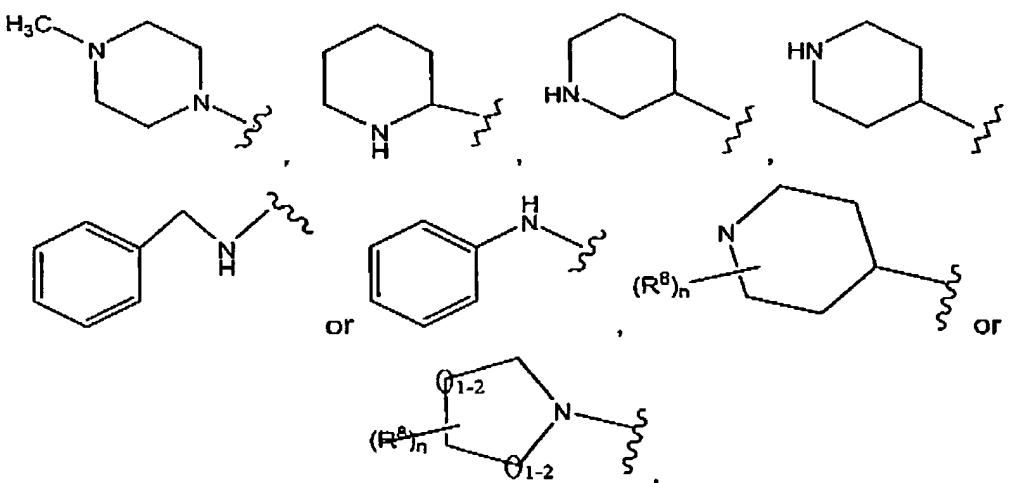
10 Claim 3 (currently amended): The compound of claim 2, wherein R is hydroxyalkyl, -(CHR<sup>5</sup>)<sub>n</sub>-aryl, or -(CHR<sup>5</sup>)<sub>n</sub>-heteroaryl, wherein each of said aryl and heteroaryl is unsubstituted or substituted with one or more groups which can be the same or different, each group being independently selected from the group consisting of heteroaryl, amine, heterocycl, -C(O)N(R<sup>5</sup>R<sup>6</sup>).

15 -S(O<sub>2</sub>)R<sup>5</sup>, -S(O<sub>2</sub>)N(R<sup>5</sup>R<sup>6</sup>), alkoxy and halo.

Claim 4 (original): The compound of claim 2, wherein R<sup>2</sup> is Br, Cl, CF<sub>3</sub>, CN, lower alkyl, cyclopropyl, alkynyl, alkyl substituted with -OR<sup>6</sup> or tetrahydrofuranyl.

Claim 5 (currently amended): The compound of claim 2, wherein R<sup>3</sup> is H,

20 lower alkyl, aryl, heteroaryl, cycloalkyl,



wherein each of said alkyl, aryl, heteroaryl, cycloalkyl and the heterocycl

25 structures shown immediately above for R<sup>3</sup> are optionally substituted with one or more moieties which moieties can be the same or different, each moiety

being independently selected from the group consisting of halogen, CF<sub>3</sub>, OCF<sub>3</sub>, lower alkyl, CN and OR<sup>5</sup>, with the proviso that no carbon adjacent to a nitrogen atom on a heterocycl ring carries a –OR<sup>5</sup> moiety.

Claim 6 (original): The compound of claim 2, wherein R<sup>4</sup> is H or lower alkyl.

5 Claim 7 (original): The compound of claim 2, wherein R<sup>5</sup> is H.

Claim 8 (original): The compound of claim 2, wherein n is 1.

Claim 9 (original): The compound of claim 1, wherein p is 1.

Claim 10 (currently amended): The compound of claim 2, wherein R is benzyl or hydroxyalkyl.

10 Claim 11 (original): The compound of claim 2, wherein R is pyrid-3-ylmethyl, wherein said pyridyl may be unsubstituted or optionally independently substituted with one or more moieties as stated in claim 1.

Claim 12 (original): The compound of claim 2, wherein R is pyrid-4-ylmethyl, wherein said pyridyl may be unsubstituted or optionally independently

15 substituted with one or more moieties as stated in claim 1.

Claim 13 (original): The compound of claim 2, wherein R is the N-oxide of pyrid-2-ylmethyl, pyrid-3-ylmethyl, or pyrid-4-ylmethyl, wherein each of said pyridyl may be unsubstituted or optionally independently substituted with one or more moieties as stated in claim 1.

20 Claim 14 (original): The compound of claim 4, wherein said R<sup>2</sup> is Br.

Claim 15 (original): The compound of claim 4, wherein said R<sup>2</sup> is Cl.

Claim 16 (original): The compound of claim 4, wherein R<sup>2</sup> is ethyl.

Claim 17 (original): The compound of claim 4, wherein R<sup>2</sup> is cyclopropyl.

Claim 18 (original): The compound of claim 4, wherein R<sup>2</sup> is ethynyl.

25 Claim 19 (currently amended): The compound of claim 2, wherein R<sup>3</sup> is lower alkyl, cycloalkyl, heterocycl, aryl or –N(R<sup>5</sup>R<sup>6</sup>).

Claim 20 (currently amended): The compound of claim 19, wherein R<sup>3</sup> is isopropyl heterocycl.

Claim 21 (original): The compound of claim 19, wherein R<sup>3</sup> is cyclohexyl or

30 norbornyl wherein each of said cyclohexyl or norbornyl can be unsubstituted or substituted with one or more moieties which can be the same or different, each moiety being independently selected from the group consisting of alkyl and hydroxyalkyl.

Claim 22 (original): The compound of claim 19, wherein R<sup>3</sup> is unsubstituted phenyl.

Claim 23 (original): The compound of claim 19, wherein R<sup>3</sup> is a phenyl substituted with one or moieties which can be the same or different, each 5 moiety being independently selected from the group consisting of F, Br, Cl and CF<sub>3</sub>.

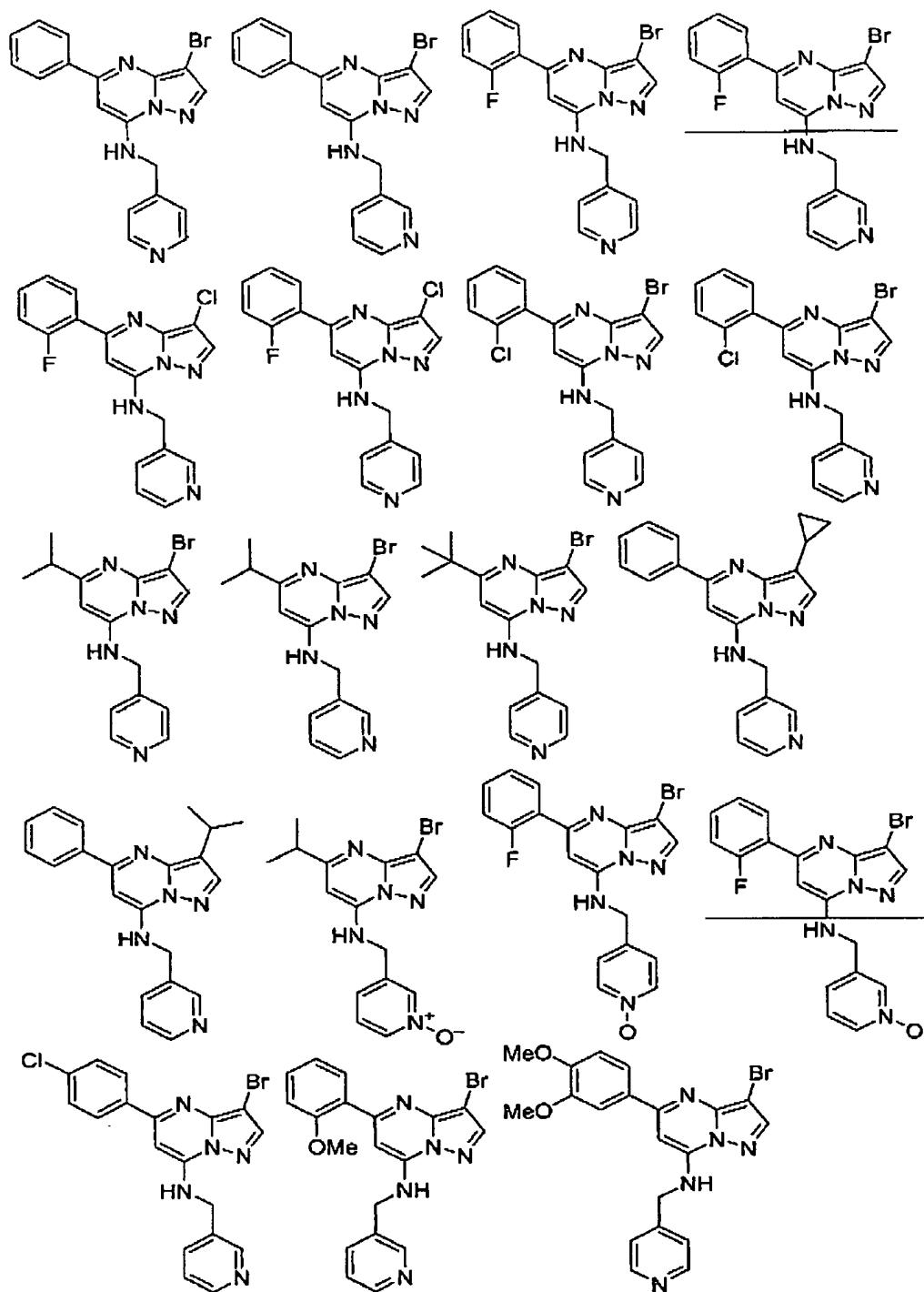
Claim 24 (original): The compound of claim 19, wherein R<sup>5</sup> of said -N(R<sup>5</sup>R<sup>6</sup>) is H or hydroxyalkyl, and R<sup>6</sup> of said -N(R<sup>5</sup>R<sup>6</sup>) is selected from the group 10 consisting of alkyl, hydroxyalkyl, cycloalkyl and methylenedioxy, wherein each of said alkyl and cycloalkyl can be unsubstituted or substituted with one or more moieties which can be the same or different, each moiety being independently selected from the group consisting of amine, ethoxycarbonyl, amide, hydroxyalkyl, hydroxy,

Claim 25 (original): The compound of claim 19, wherein R<sup>5</sup> and R<sup>6</sup> of said 15 -N(R<sup>5</sup>R<sup>6</sup>) are joined together to form a heterocycll moiety, wherein said heterocycll moiety can be unsubstituted or optionally independently substituted with one or more groups which can be the same or different, each group being selected from the group consisting of hydroxyalkyl, amide, -C(O)R<sup>5</sup>, >C(CH<sub>3</sub>)<sub>2</sub>, -S(O<sub>2</sub>)R<sup>5</sup>, -S(O<sub>2</sub>)N(R<sup>5</sup>R<sup>6</sup>), -C(=NH)N(R<sup>5</sup>R<sup>6</sup>) and 20 -C(=N-CN)N(R<sup>5</sup>R<sup>6</sup>).

Claim 26 (original): The compound of claim 25, wherein said heterocycll moiety formed by R<sup>5</sup> and R<sup>6</sup> is a pyrrolidine or piperidine ring.

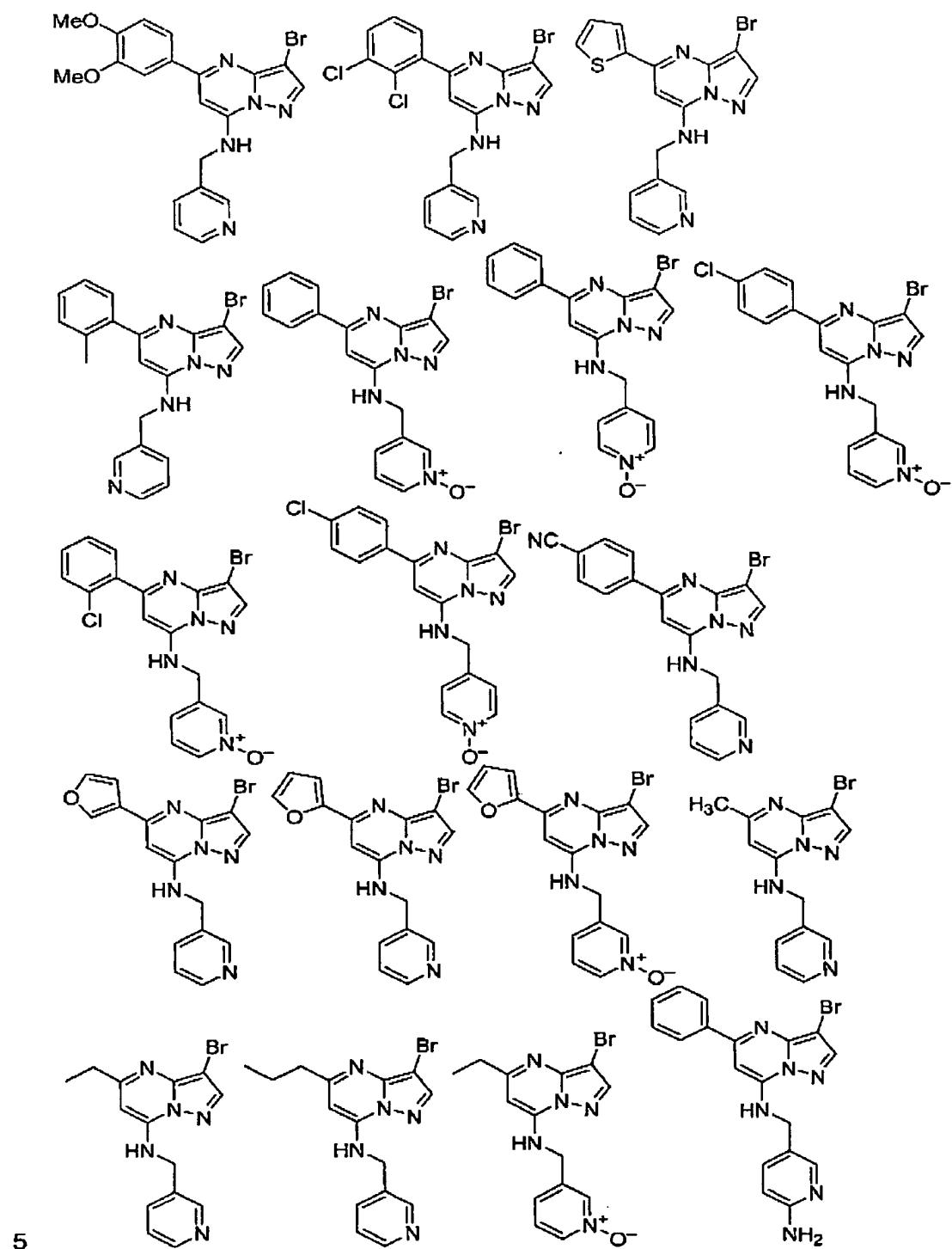
Claim 27 (currently amended): A compound of the formula:

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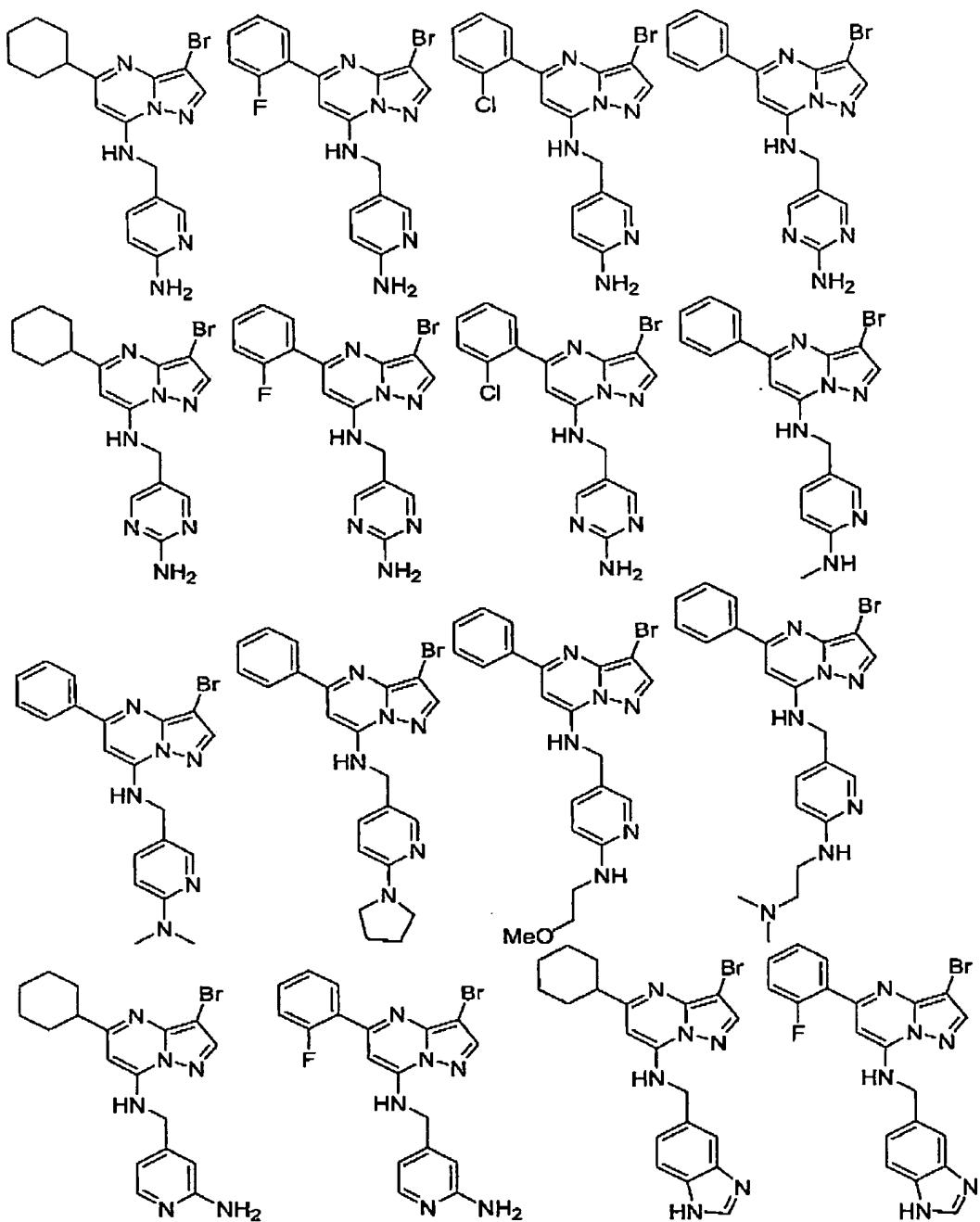
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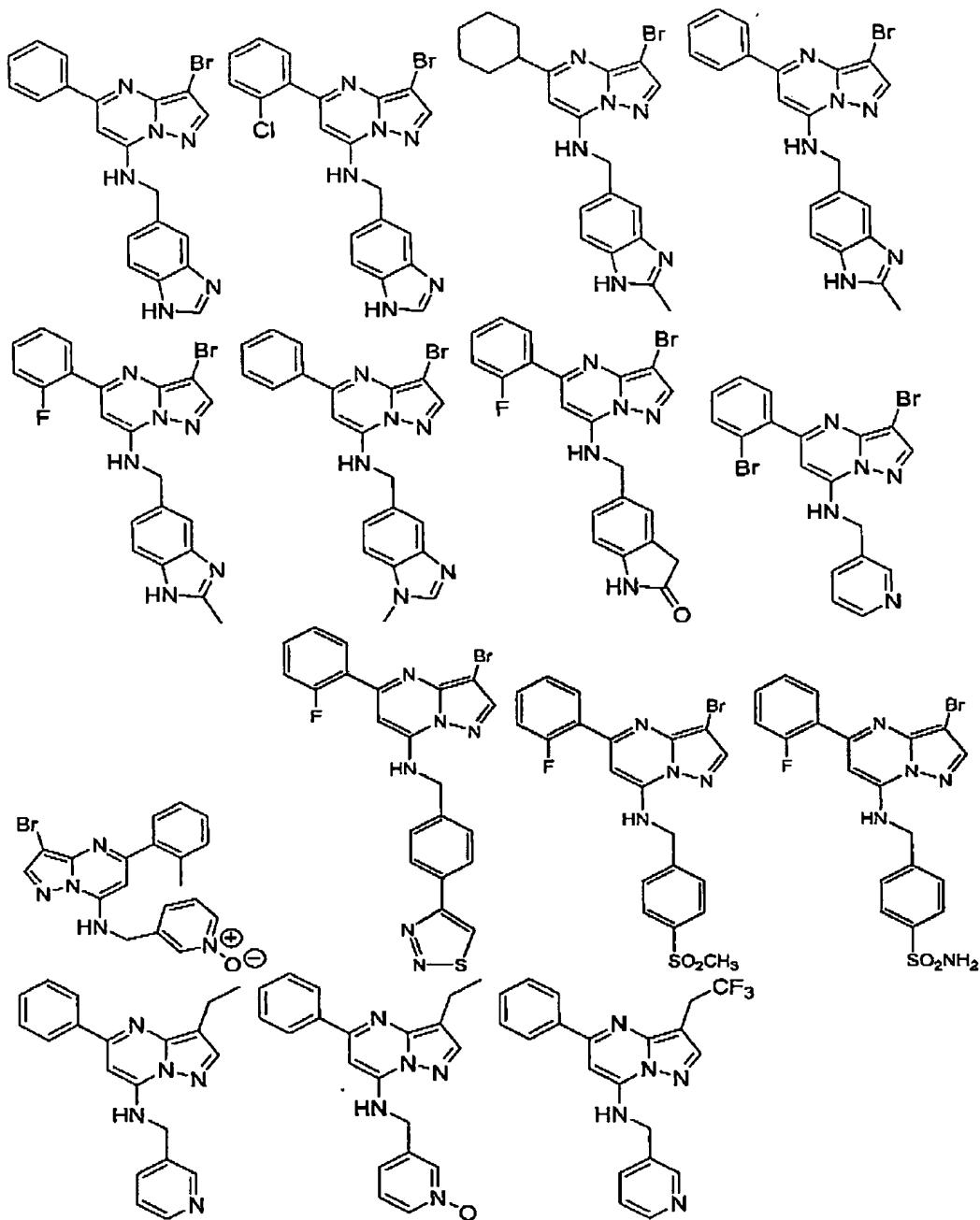


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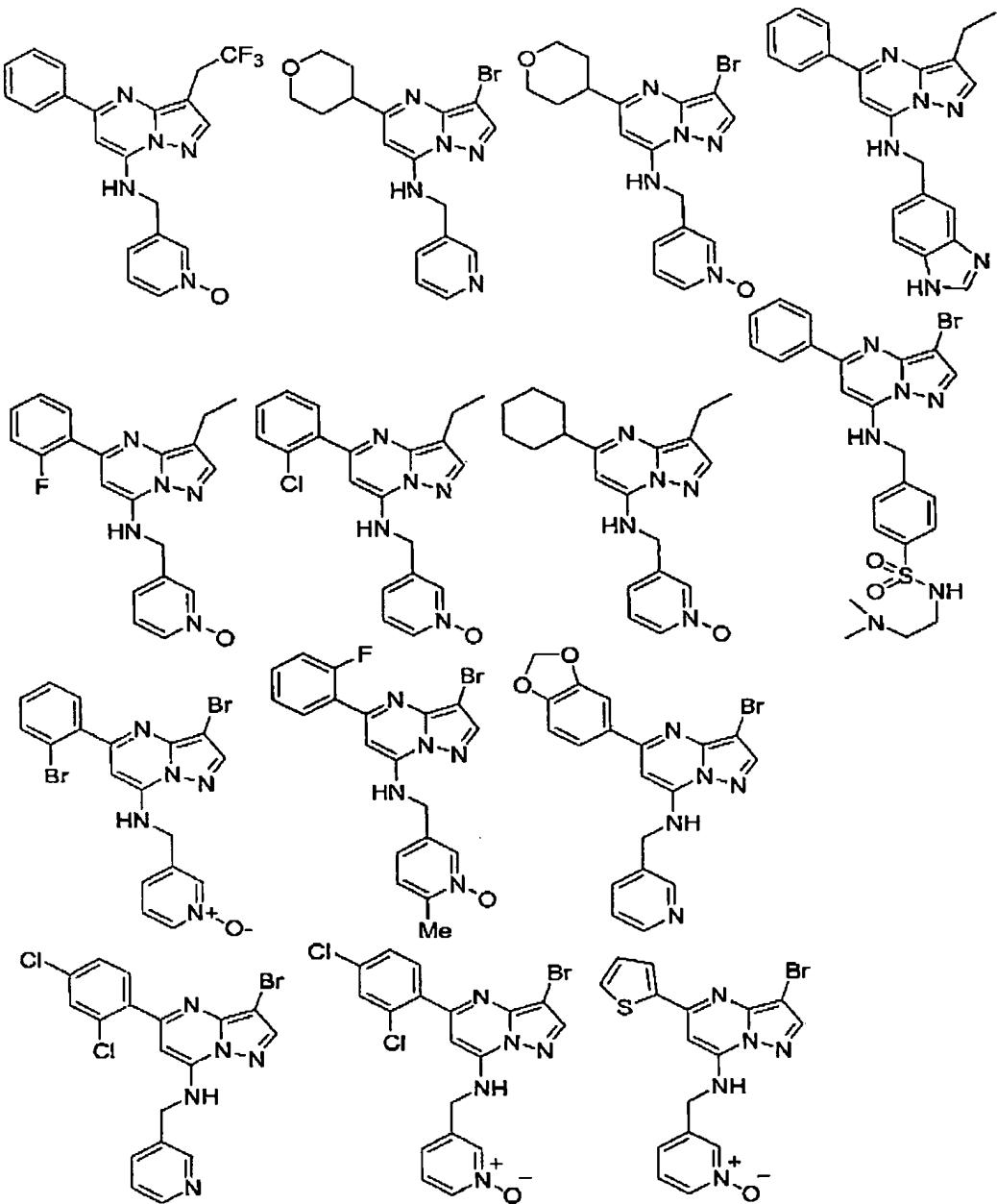
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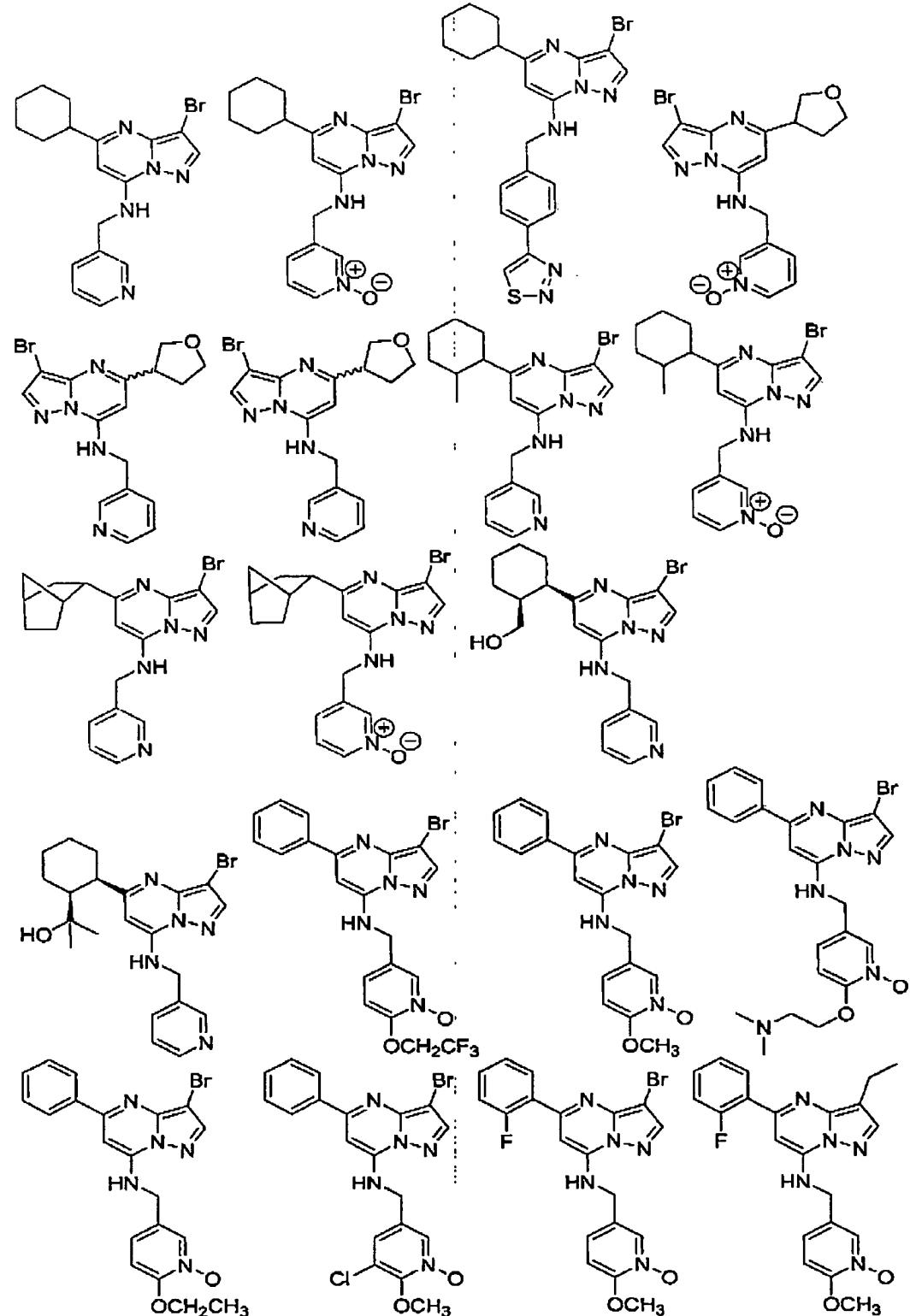
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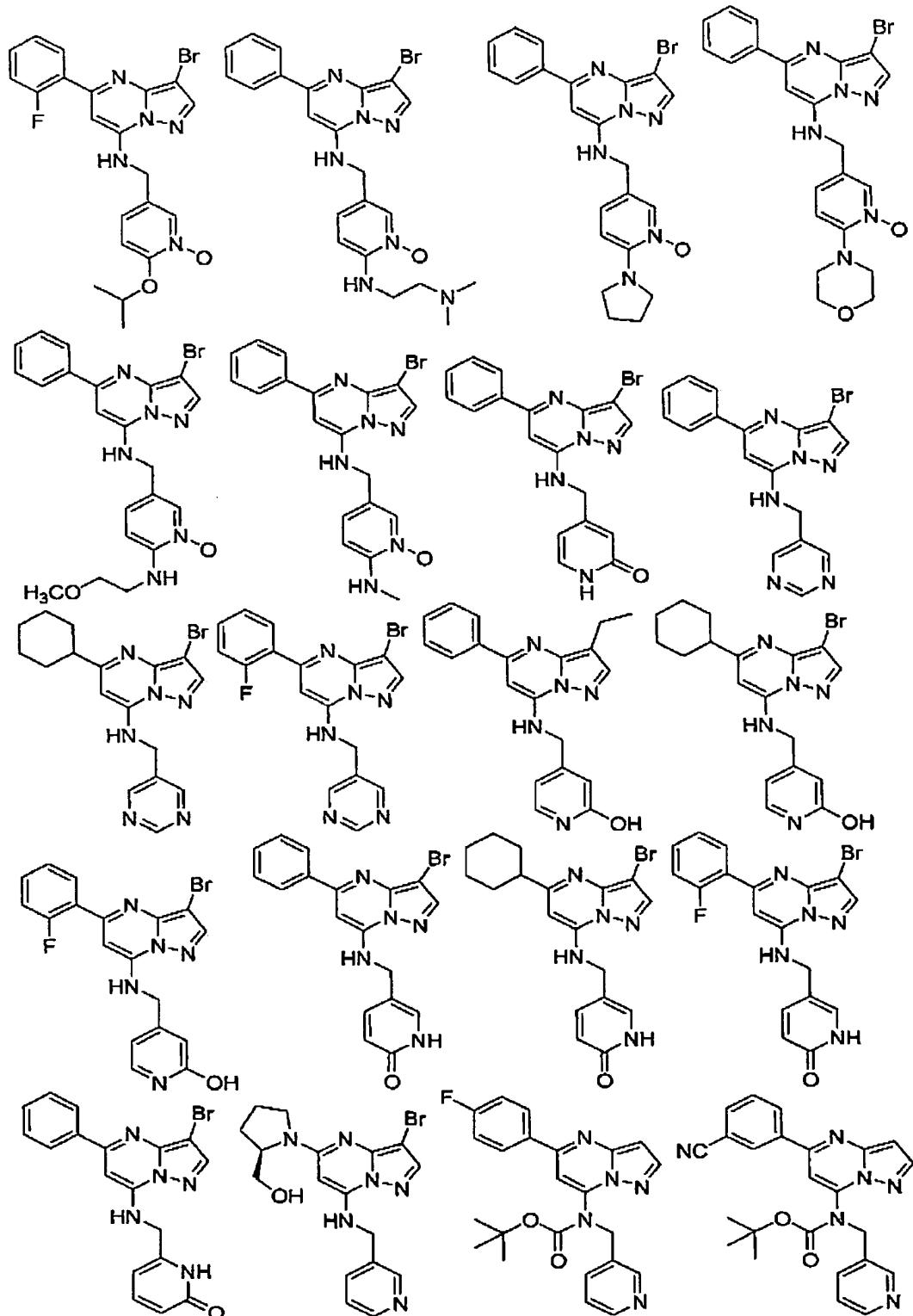
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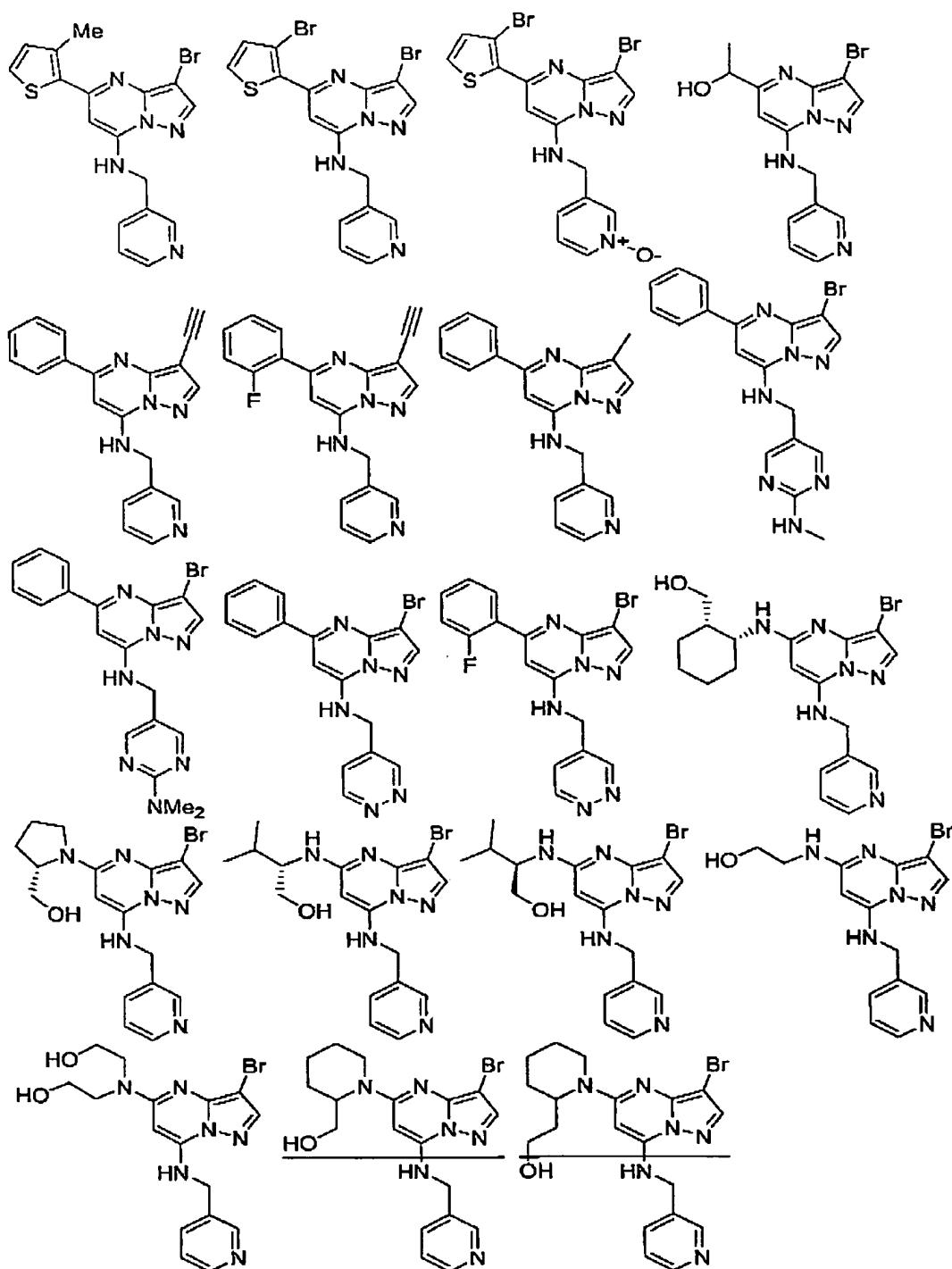


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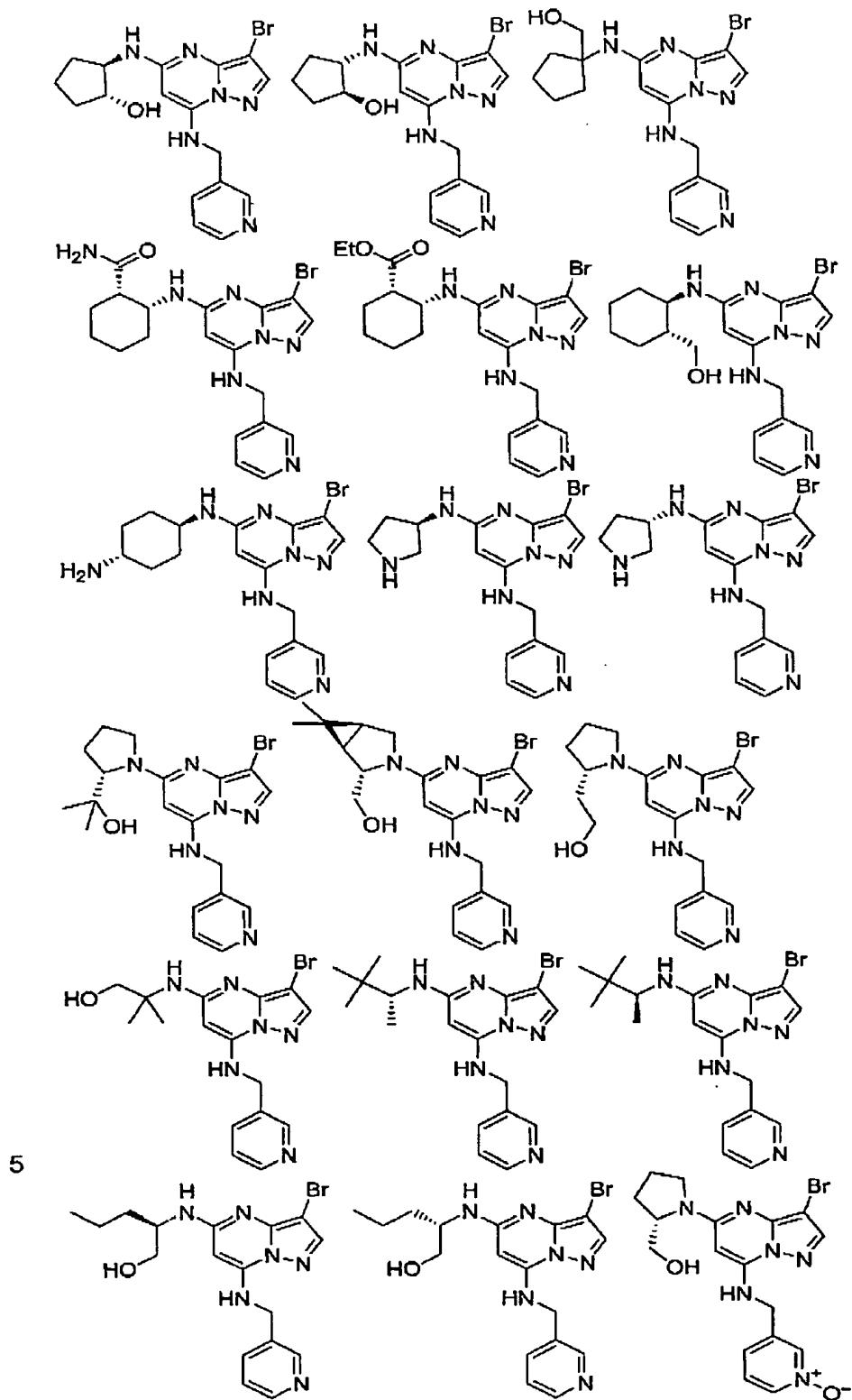
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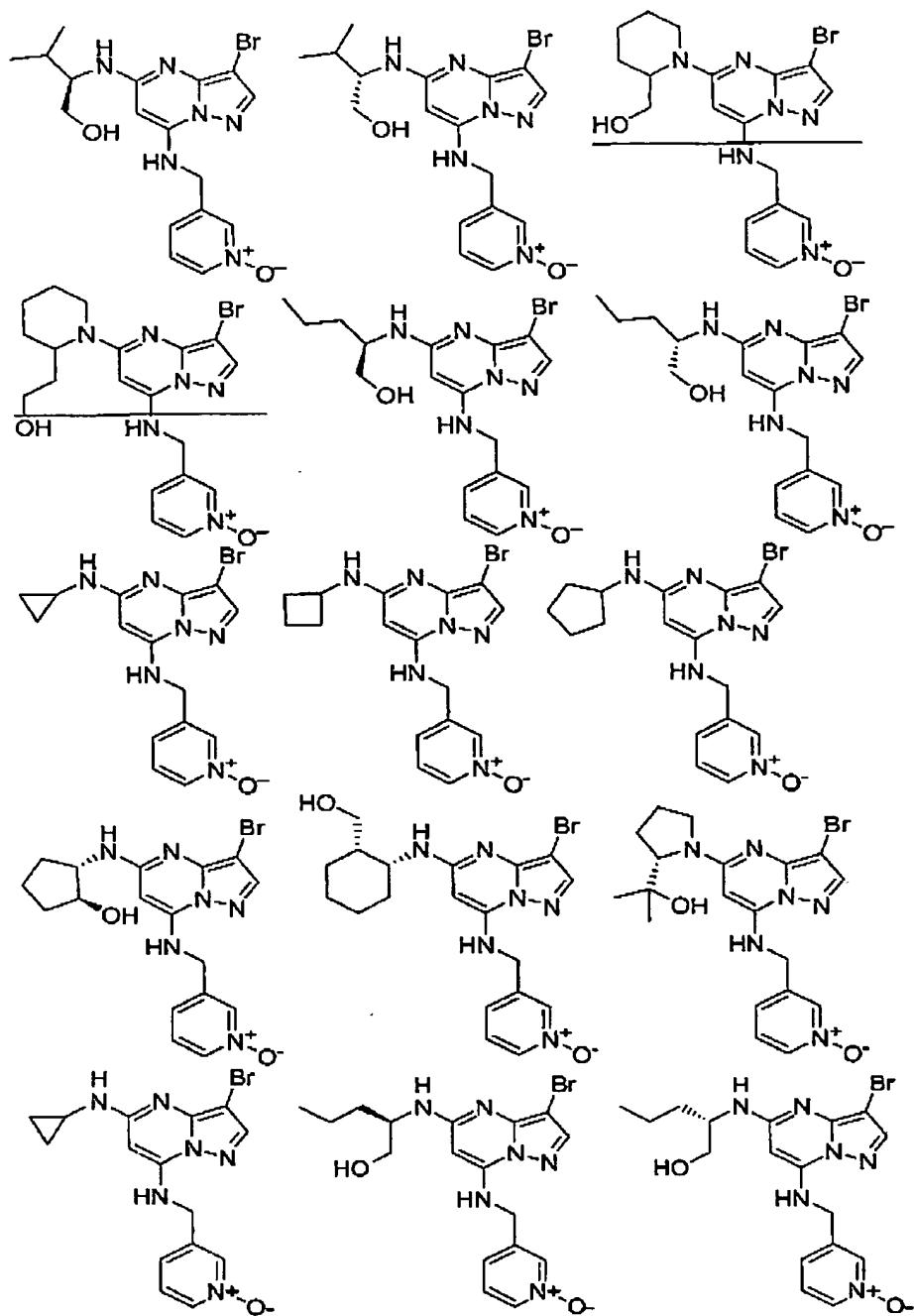


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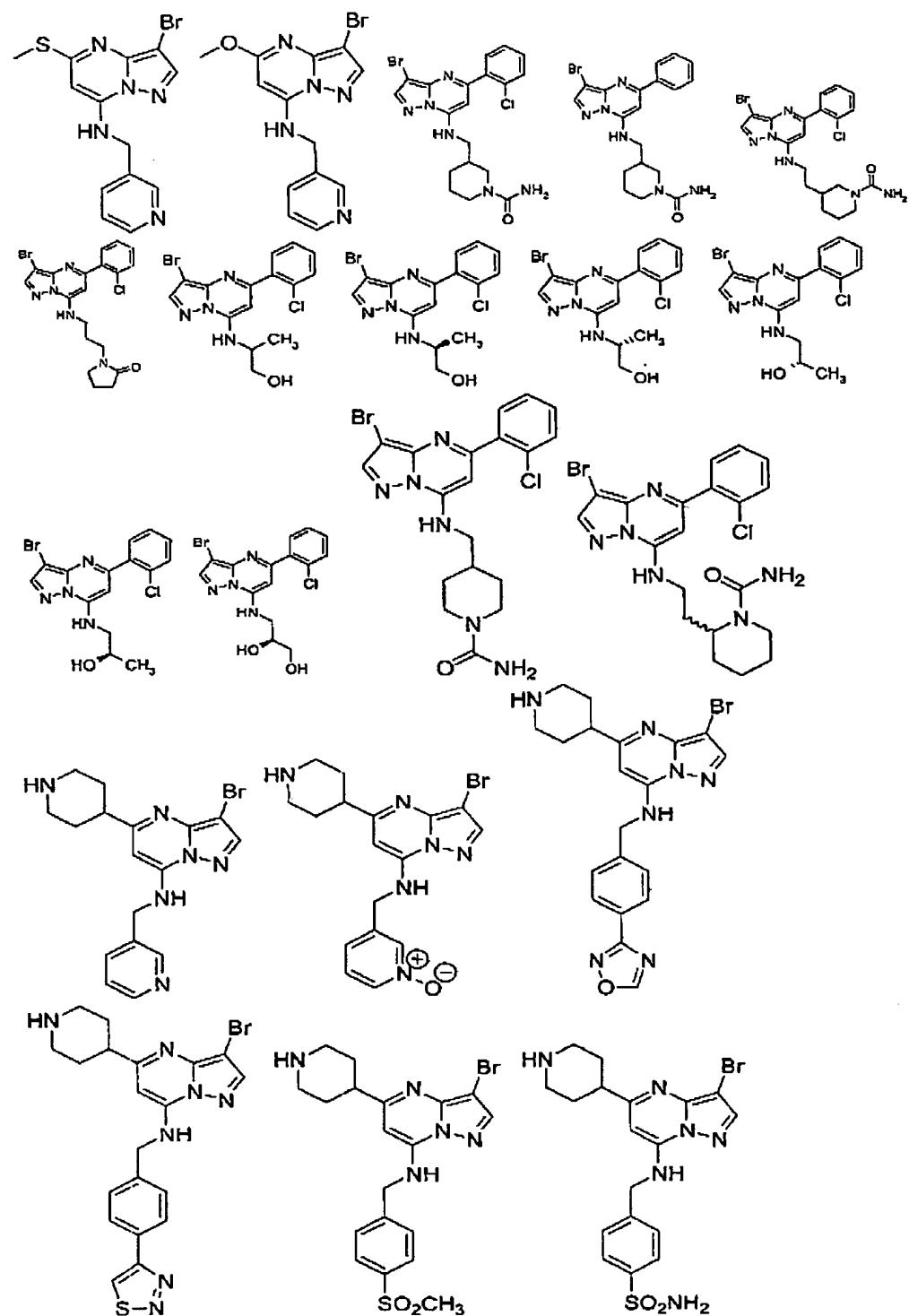
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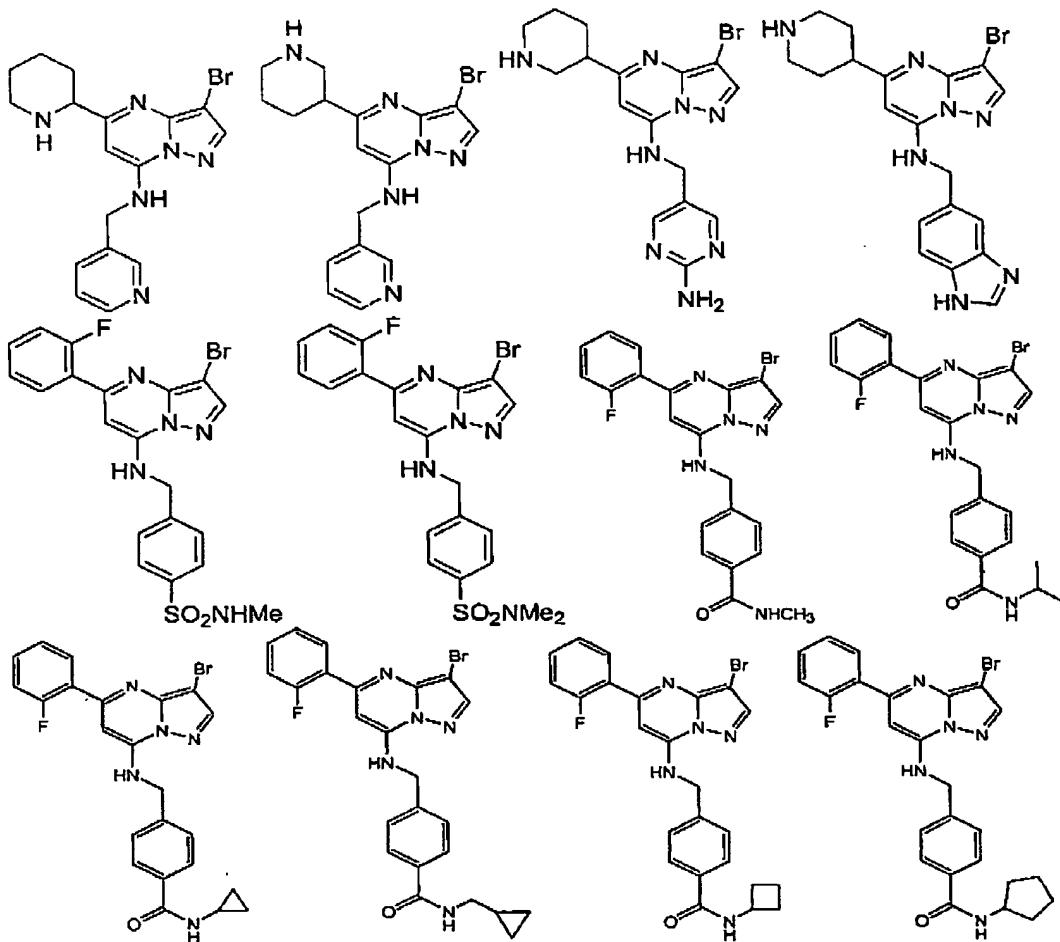
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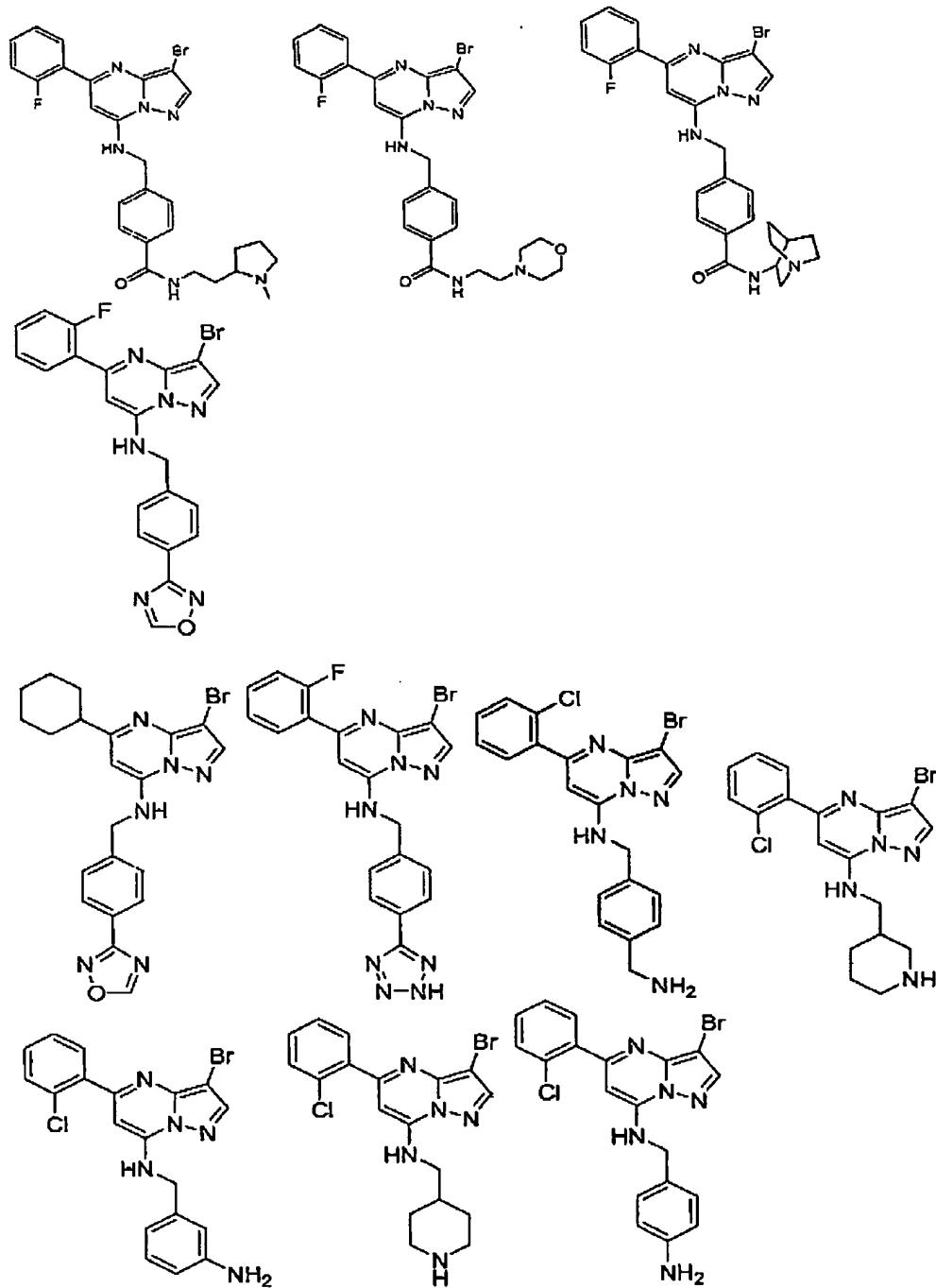
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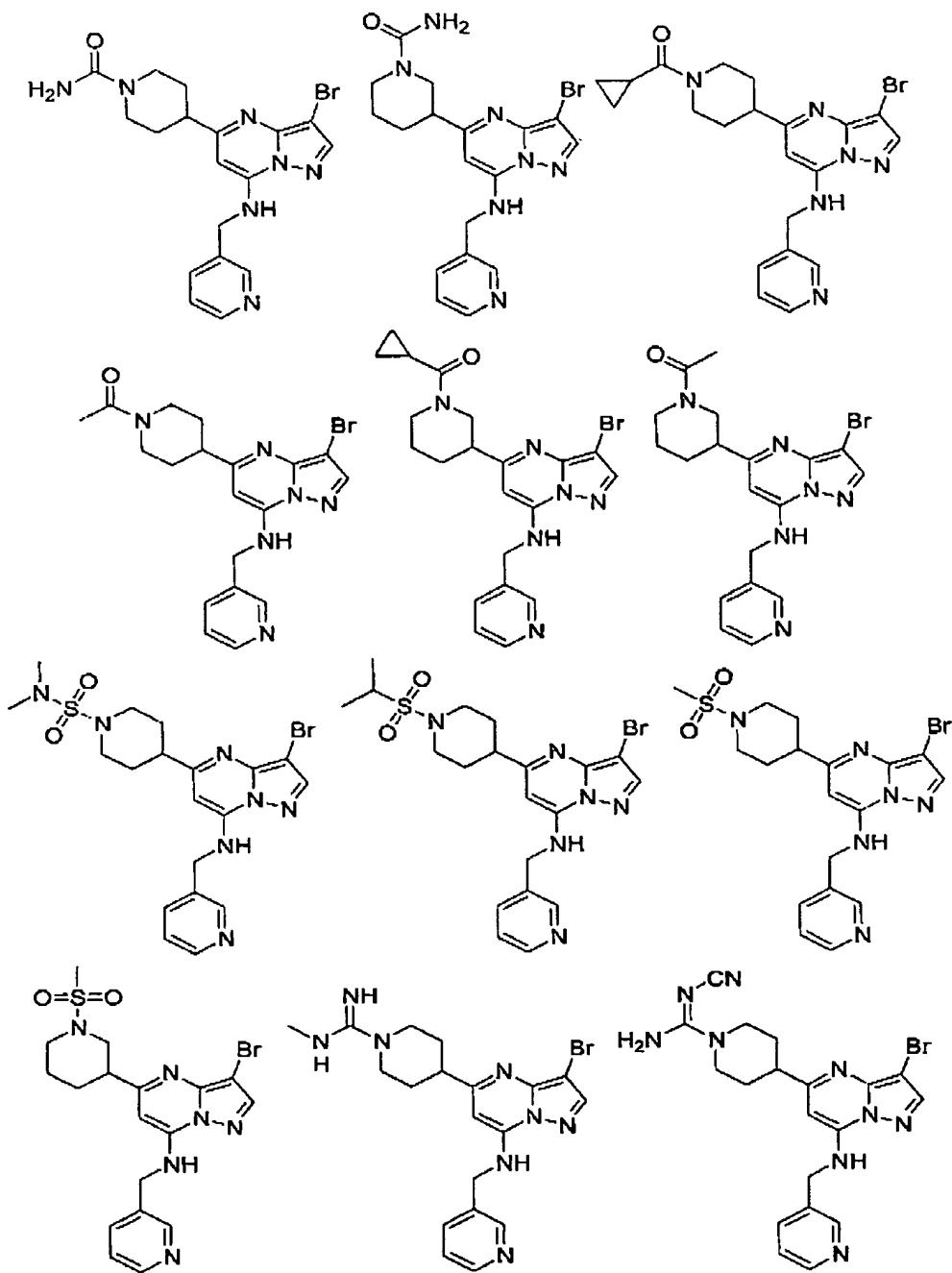


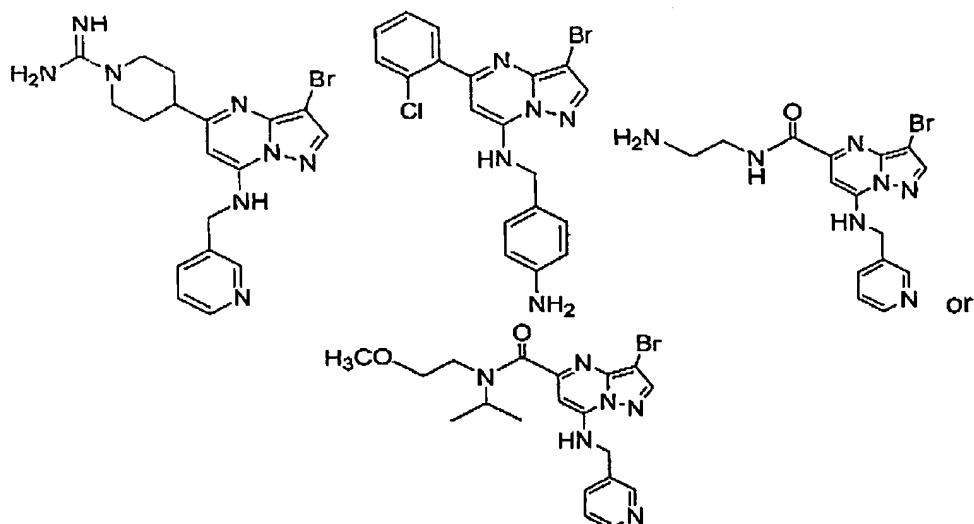
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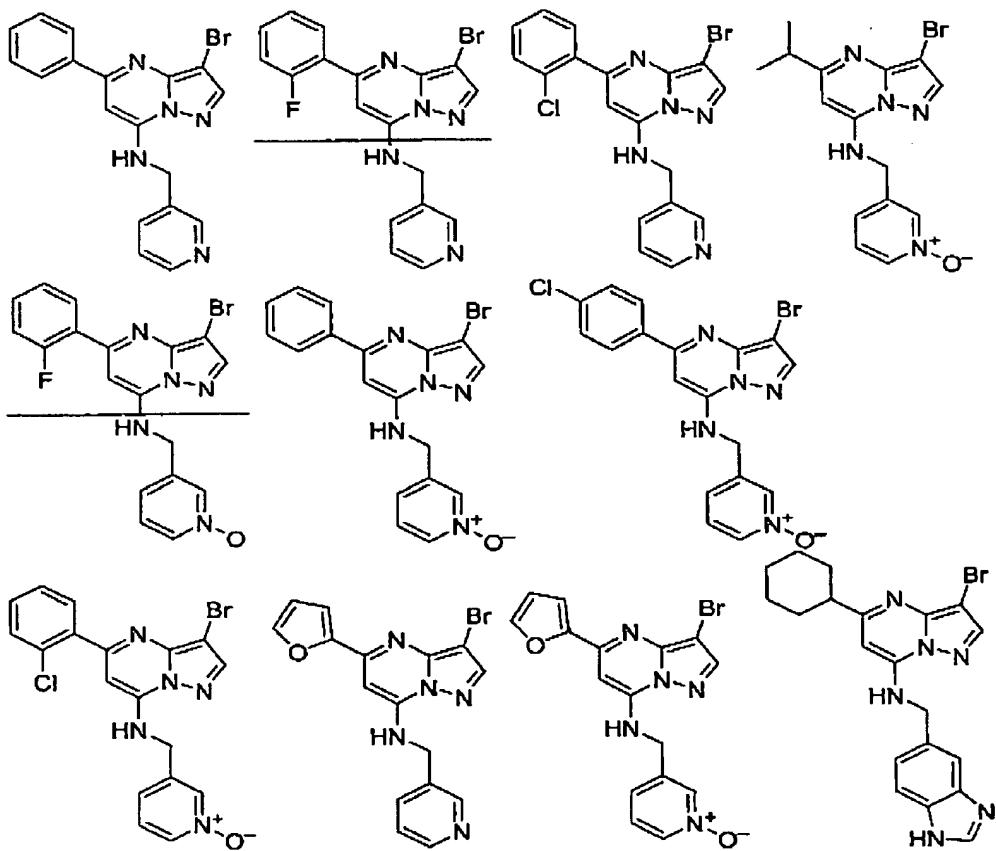
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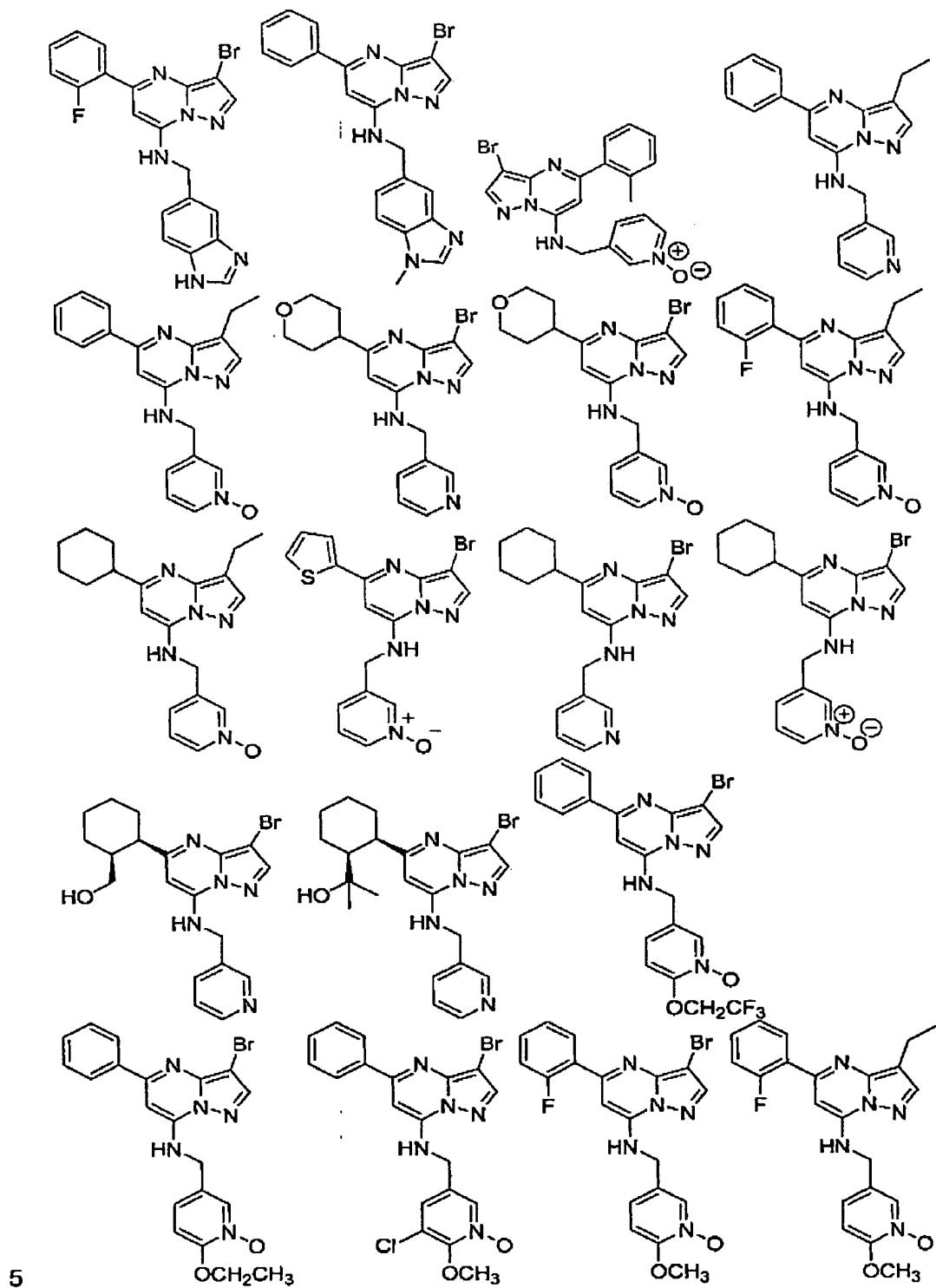


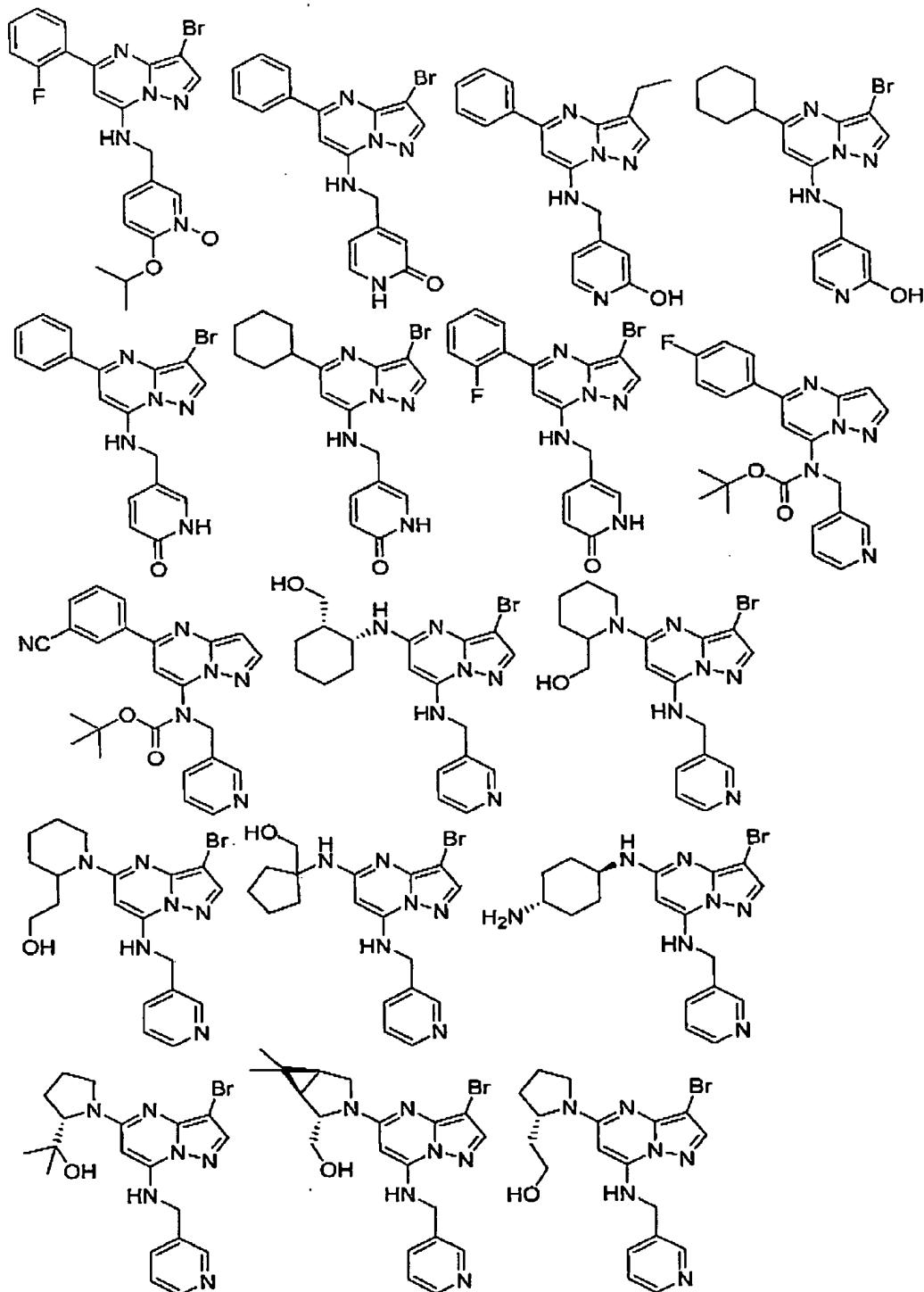


or a pharmaceutically acceptable salt thereof.

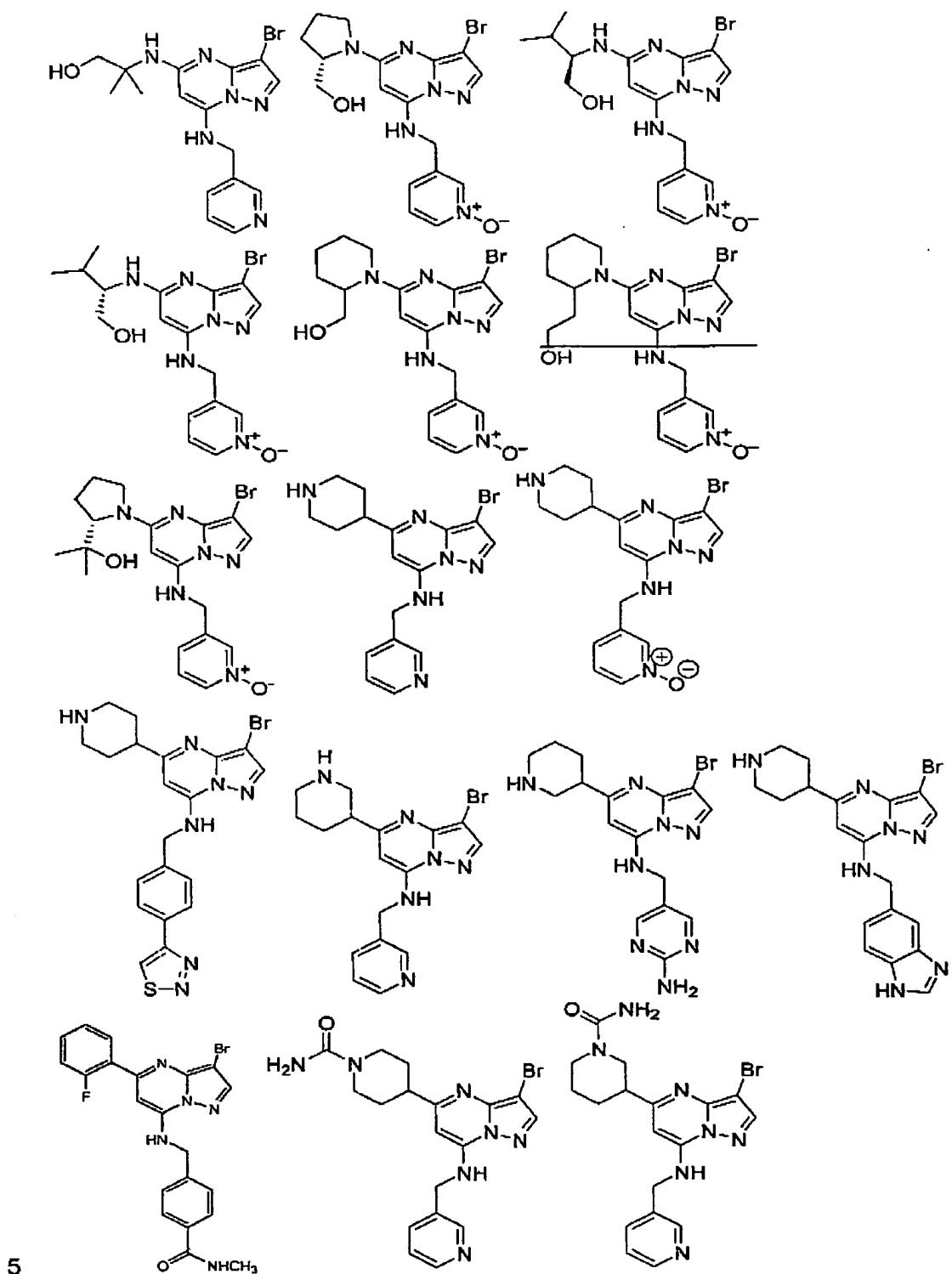
5 Claim 28 (currently amended): A compound of the formula:

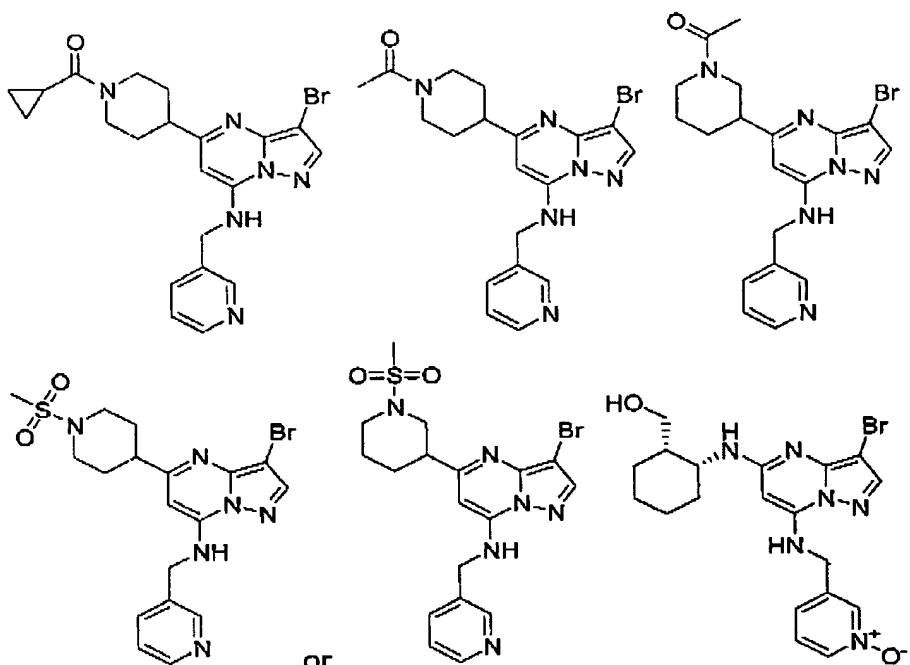






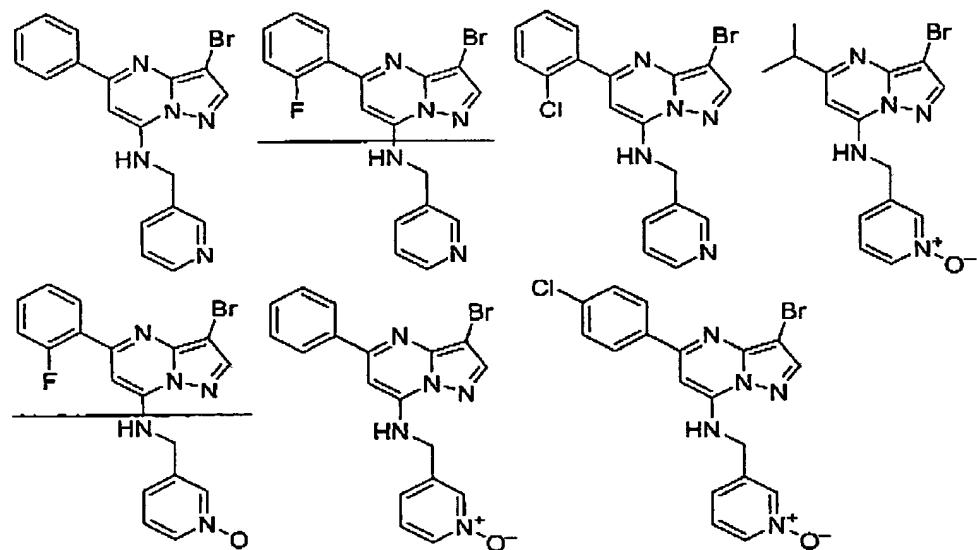
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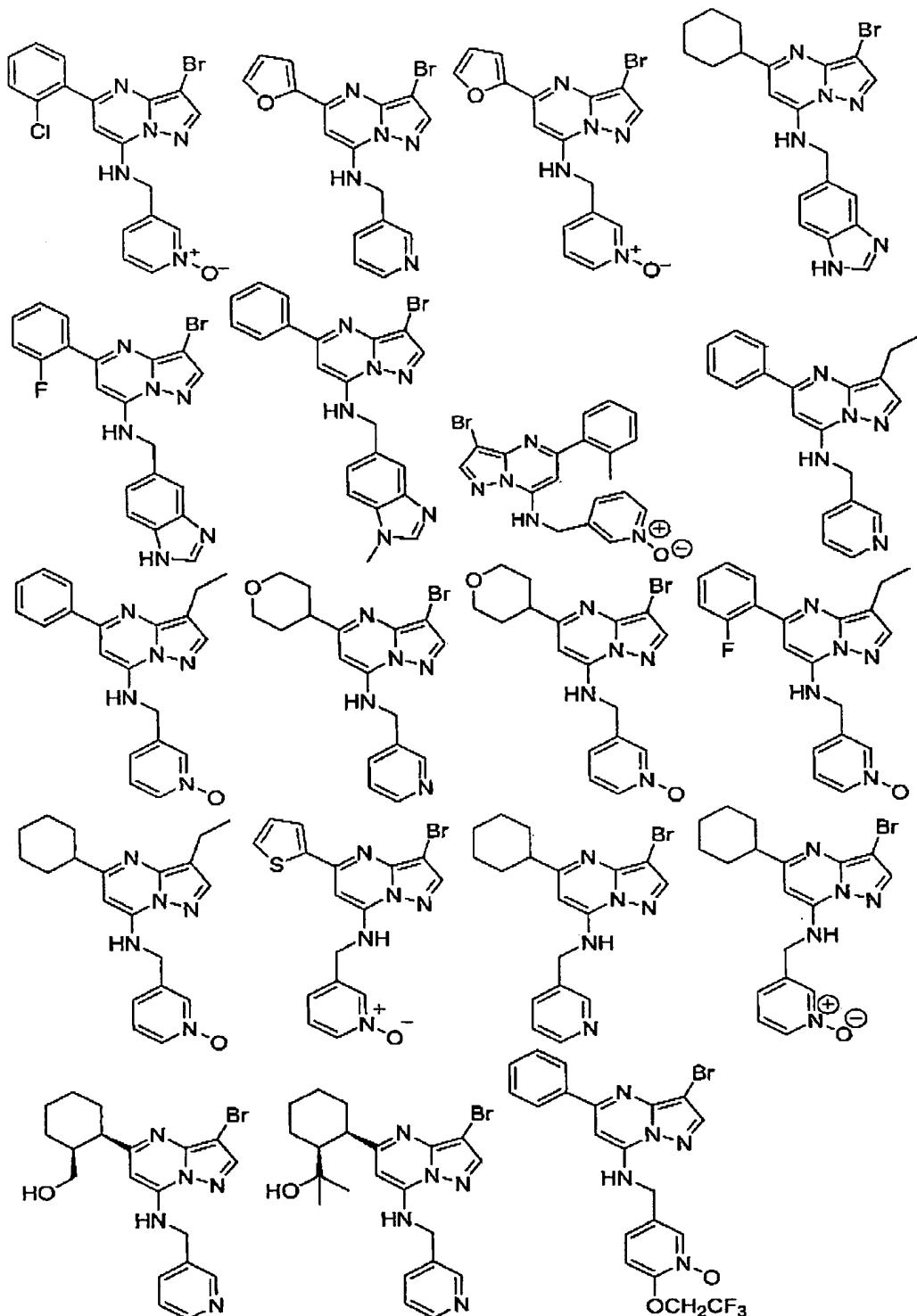


or a pharmaceutically acceptable salt thereof.

Claim 29 (currently amended): A compound of the formula:

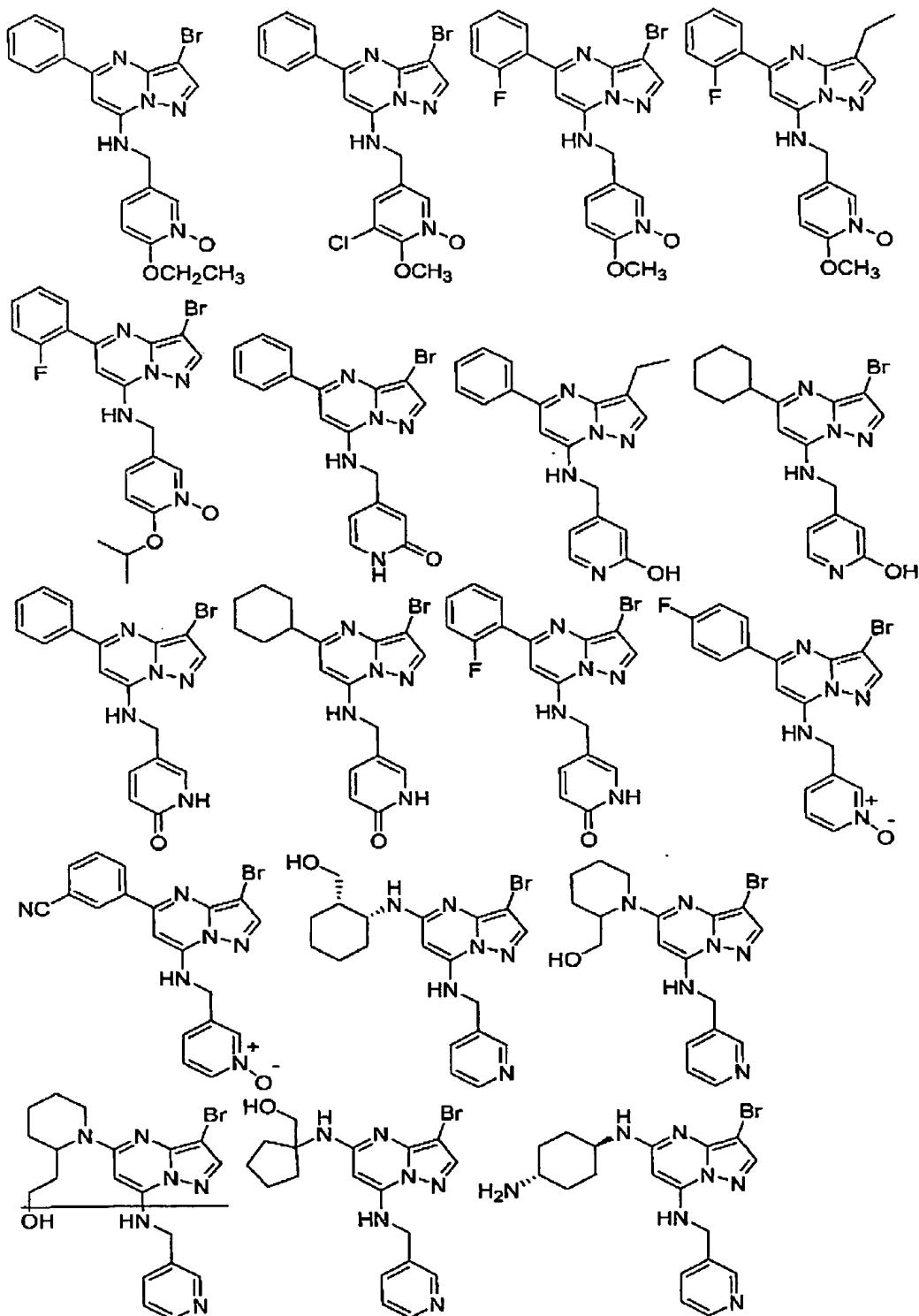


29

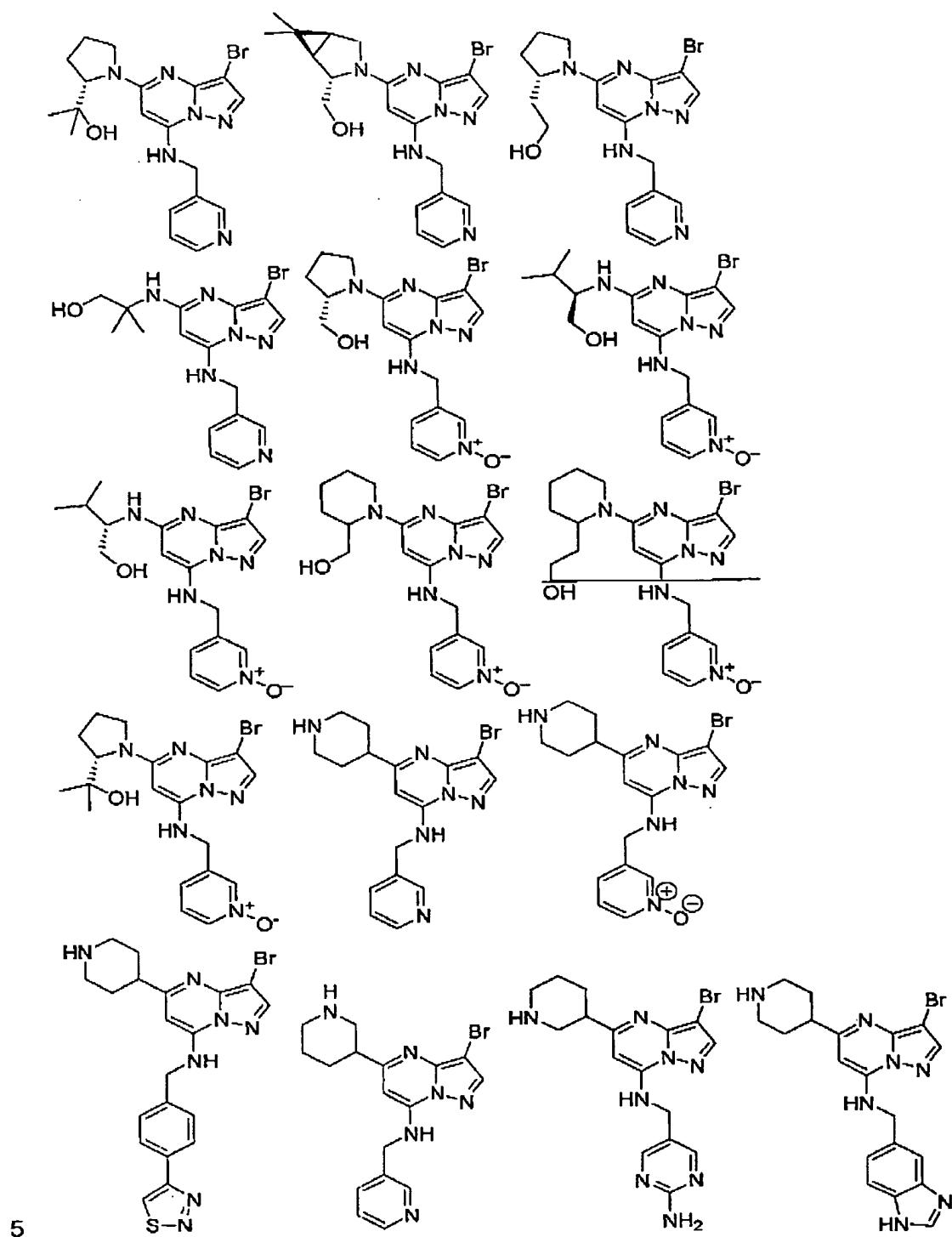


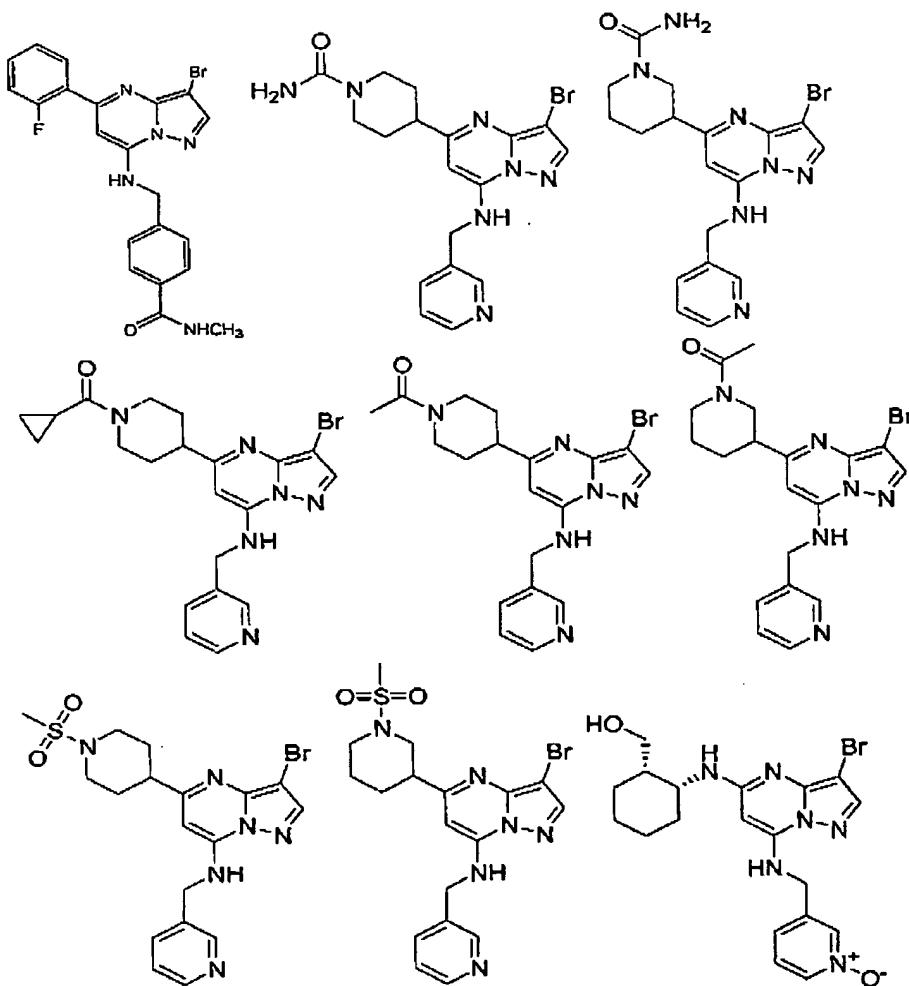
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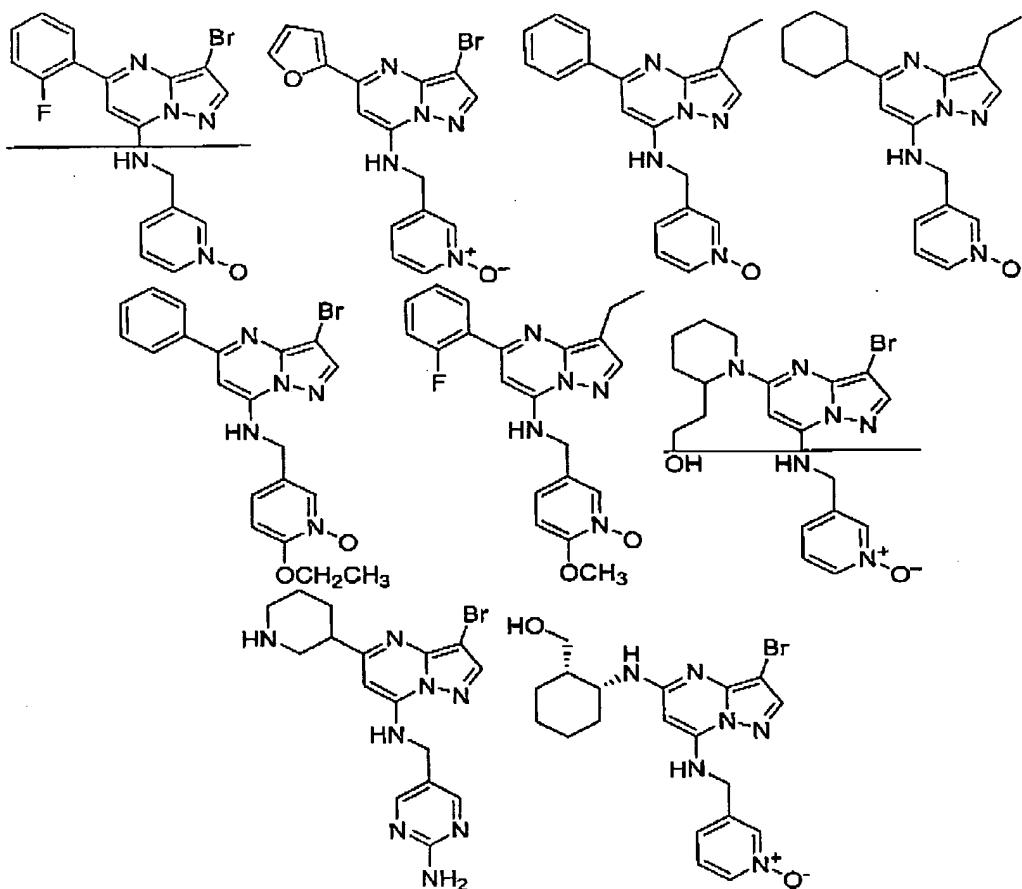
31





5 or a pharmaceutically acceptable salt thereof.

Claim 30 (currently amended): A compound of the formula:



5 or a pharmaceutically acceptable salt thereof.

**Claim 31 (currently amended): A method of inhibiting one or more cyclin dependent kinases kinase1 (CDK1) or cyclin dependent kinase 2 (CDK2), comprising administering a ~~therapeutically effective amount of~~ at least one compound of claim 1.**

10 **Claim 32 (Currently amended): A method of treating one or more diseases associated with cyclin dependent kinase by inhibiting CDK1 or CDK2, comprising administering a ~~therapeutically effective amount of~~ at least one compound of claim 1.**

**Claim 33 (currently amended): The method of claim 32, wherein said cyclin**

**15 dependent kinase is treatment is by inhibiting CDK2.**

Claim 34 (currently amended): The method of claim 32, wherein said cyclin dependent kinase is mitogen activated protein kinase (MAPK/ERK) treatment is by inhibiting CDK1.

Claim 35: cancelled.

5 Claim 36 (original): The method of claim 32, wherein said disease is selected from the group consisting of:

cancer of the bladder, breast, colon, kidney, liver, lung, small cell lung cancer, esophagus, gall bladder, ovary, pancreas, stomach, cervix, thyroid, prostate, and skin, including squamous cell carcinoma;

10 leukemia, acute lymphocytic leukemia, acute lymphoblastic leukemia, B-cell lymphoma, T- cell lymphoma, Hodgkins lymphoma, non-Hodgkins lymphoma, hairy cell lymphoma and Burkett's lymphoma;

acute and chronic myelogenous leukemia, myelodysplastic syndrome and promyelocytic leukemia;

15 fibrosarcoma, rhabdomyosarcoma;

astrocytoma, neuroblastoma, glioma and schwannomas; melanoma, seminoma, teratocarcinoma, osteosarcoma, xenoderoma pigmentosum, keratoctanthoma, thyroid follicular cancer and Kaposi's sarcoma.

20 Claim 37 (currently amended): A method of treating one or more diseases associated with cyclin-dependent kinase by inhibiting CDK1 or CDK2, comprising administering to a mammal in need of such treatment

an amount of a first compound, which is a compound of claim 1, or a pharmaceutically acceptable salt thereof;

25 and

an amount of at least one second compound, said second compound being an anti-cancer agent;

wherein the amounts of the first compound and said second compound result in a therapeutic effect.

30 Claim 38 (original): The method of claim 37, further comprising radiation therapy.

Claim 39 (original): The method of claim 37, wherein said anti-cancer agent is selected from the group consisting of a cytostatic agent, cisplatin, doxorubicin, taxotere, taxol, etoposide, CPT-11, irinotecan, camptostar, topotecan,

paclitaxel, docetaxel, epothilones, tamoxifen, 5-fluorouracil, methotrexate, 5FU, temozolomide, cyclophosphamide, SCH 66336, R115777, L778,123, BMS 214662, Iressa, Tarceva, antibodies to EGFR, Gleevec, intron, ara-C, adriamycin, cytoxan, gemcitabine, Uracil mustard, Chlormethine, Ifosfamide,

5 Melphalan, Chlorambucil, Pipobroman, Triethylenemelamine, Triethylenethiophosphoramide, Busulfan, Carmustine, Lomustine, Streptozocin, Dacarbazine, Floxuridine, Cytarabine, 6-Mercaptopurine, 6-Thioguanine, Fludarabine phosphate, oxaliplatin, leucovirin, ELOXATIN™, Pentostatine, Vinblastine, Vincristine, Vindesine, Bleomycin, Dactinomycin,

10 Daunorubicin, Doxorubicin, Epirubicin, Idarubicin, Mithramycin, Deoxycoformycin, Mitomycin-C, L-Asparaginase, Teniposide 17 $\alpha$ -Ethinylestradiol, Diethylstilbestrol, Testosterone, Prednisone, Fluoxymesterone, Dromostanolone propionate, Testolactone, Megestrolacetate, Methylprednisolone, Methyltestosterone, Prednisolone.

15 Triamcinolone, Chlorotrianisene, Hydroxyprogesterone, Aminoglutethimide, Estramustine, Medroxyprogesteroneacetate, Leuprolide, Flutamide, Toremifene, goserelin, Cisplatin, Carboplatin, Hydroxyurea, Amsacrine, Procarbazine, Mitotane, Mitoxantrone, Levamisole, Navelbene, CPT-11, Anastrazole, Letrazole, Capecitabine, Reloxafine, Droloxafine, or

20 Hexamethylmelamine.

Claim 40 (currently amended): A pharmaceutical composition comprising a therapeutically effective amount of at least one compound of claim 1 in combination with at least one pharmaceutically acceptable carrier.

Claim 41 (original): The pharmaceutical composition of claim 38, additionally

25 comprising one or more anti-cancer agents selected from the group consisting of cytostatic agent, cisplatin, doxorubicin, taxotere, taxol, etoposide, CPT-11, irinotecan, camptostar, topotecan, paclitaxel, docetaxel, epothilones, tamoxifen, 5-fluorouracil, methotrexate, 5FU, temozolomide, cyclophosphamide, SCH 66336, R115777, L778,123, BMS 214662, Iressa,

30 Tarceva, antibodies to EGFR, Gleevec, intron, ara-C, adriamycin, cytoxan, gemcitabine, Uracil mustard, Chlormethine, Ifosfamide, Melphalan, Chlorambucil, Pipobroman, Triethylenemelamine, Triethylenethiophosphoramide, Busulfan, Carmustine, Lomustine,

Streptozocin, Dacarbazine, Flouxuridine, Cytarabine, 6-Mercaptopurine, 6-Thioguanine, Fludarabine phosphate, Pentostatine, Vinblastine, Vincristine, Vindesine, Bleomycin, Dactinomycin, Daunorubicin, Doxorubicin, Epirubicin, Idarubicin, Mithramycin, Deoxycoformycin, Mitomycin-C, L-Asparaginase,

5 Teniposide 17 $\alpha$ -Ethinylestradiol, Diethylstilbestrol, Testosterone, Prednisone, Fluoxymesterone, Dromostanolone propionate, Testolactone,

Megestrolacetate, Methylprednisolone, Methyltestosterone, Prednisolone, Triamcinolone, Chlorotrianisene, Hydroxyprogesterone, Aminoglutethimide, Estramustine, Medroxyprogesteroneacetate, Leuprolide, Flutamide,

10 Toremifene, goserelin, Cisplatin, Carboplatin, Hydroxyurea, Amsacrine, Procarbazine, Mitotane, Mitoxantrone, Levamisole, Navelbene, CPT-11, Anastrazole, Letrazole, Capecitabine, Reloxafine, Droloxafine, or Hexamethylmelamine.

Claim 42 (original): A compound of claim 1 in purified form.

15 Claim 43 (currently amended): A method of treating a cancer by inhibiting CDK1 or CDK2, comprising administering a therapeutically effective amount of at least one compound of claim 1.

Claim 44 (previously presented): The method of claim 43, wherein said disease is selected from the group consisting of:

20 cancer of the bladder, breast, colon, kidney, liver, lung, small cell lung cancer, esophagus, gall bladder, ovary, pancreas, stomach, cervix, thyroid, prostate, and skin, including squamous cell carcinoma;

leukemia, acute lymphocytic leukemia, acute lymphoblastic leukemia, B-cell lymphoma, T- cell lymphoma, Hodgkins lymphoma, non-Hodgkins

25 lymphoma, hairy cell lymphoma and Burkett's lymphoma;

acute and chronic myelogenous leukemia, myelodysplastic syndrome and promyelocytic leukemia;

fibrosarcoma, rhabdomyosarcoma;

astrocytoma, neuroblastoma, glioma and schwannomas;

30 melanoma, seminoma, teratocarcinoma, osteosarcoma, xenoderoma pigmentosum, keratoctanthoma, thyroid follicular cancer and Kaposi's sarcoma.

Claim 45 (currently amended): A method of treating a cancer by inhibiting CDK1 or CDK2, comprising administering to a mammal in need of such treatment

an amount of a first compound, which is a compound of claim 1, or a  
5 pharmaceutically acceptable salt thereof;  
and

an amount of at least one second compound, said second compound being an anti-cancer agent;

10 wherein the amounts of the first compound and said second compound result in a therapeutic effect.

Claim 46 (previously presented): The method of claim 45, further comprising radiation therapy.

Claim 47 (previously presented): The method of claim 45, wherein said anti-cancer agent is selected from the group consisting of a cytostatic agent,  
15 cisplatin, doxorubicin, taxotere, taxol, etoposide, CPT-11, irinotecan, camptostar, topotecan, paclitaxel, docetaxel, epothilones, tamoxifen, 5-fluorouracil, methotrexate, 5FU, temozolomide, cyclophosphamide, SCH 66336, R115777, L778,123, BMS 214662, Iressa, Tarceva, antibodies to EGFR, Gleevec, intron, ara-C, adriamycin, cytoxan, gemcitabine, Uracil  
20 mustard, Chlormethine, Ifosfamide, Melphalan, Chlorambucil, Pipobroman, Triethylenemelamine, Triethylenethiophosphoramine, Busulfan, Carmustine, Lomustine, Streptozocin, Dacarbazine, Floxuridine, Cytarabine, 6-Mercaptopurine, 6-Thioguanine, Fludarabine phosphate, oxaliplatin, leucovirin, ELOXATIN™, Pentostatine, Vinblastine, Vincristine, Vindesine,  
25 Bleomycin, Dactinomycin, Daunorubicin, Doxorubicin, Epirubicin, Idarubicin, Mithramycin, Deoxycoformycin, Mitomycin-C, L-Asparaginase, Teniposide 17 $\alpha$ -Ethinylestradiol, Diethylstilbestrol, Testosterone, Prednisone, Fluoxymesterone, Dromostanolone propionate, Testolactone, Megestrolacetate, Methylprednisolone, Methyltestosterone, Prednisolone,  
30 Triamcinolone, Chlorotrianisene, Hydroxyprogesterone, Aminoglutethimide, Estramustine, Medroxyprogesteroneacetate, Leuprolide, Flutamide, Torernifene, goserelin, Cisplatin, Carboplatin, Hydroxyurea, Amsacrine, Procarbazine, Mitotane, Mitoxantrone, Levamisole, Navelbene, CPT-11,

Anastrazole, Letrazole, Capecitabine, Reloxafine, Droloxafine, or  
Hexamethylmelamine.